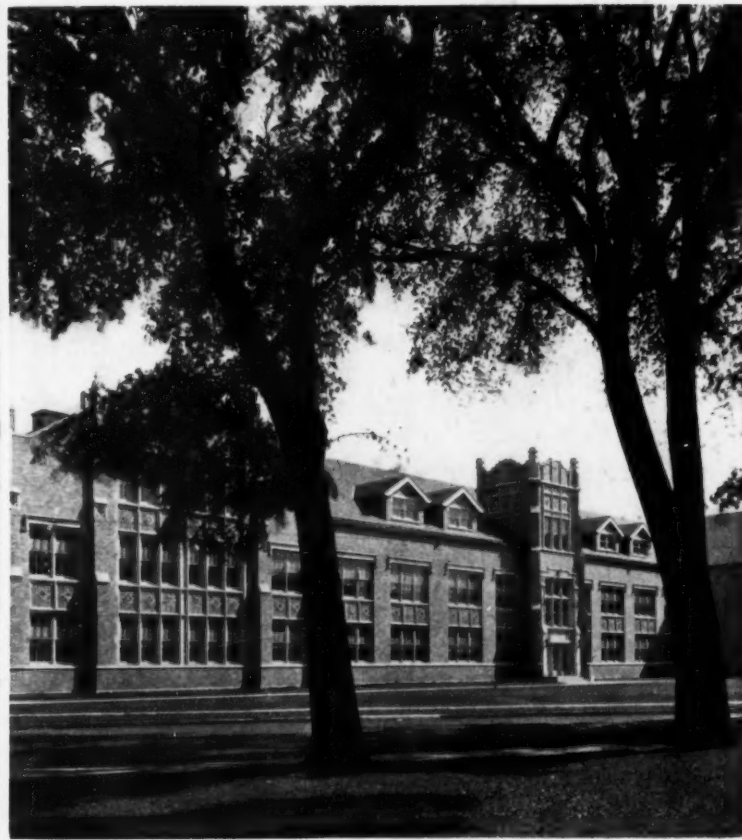


# *The* NATION'S SCHOOLS

DEVOTED TO THE APPLICATION OF  
RESEARCH TO THE BUILDING, EQUIPMENT  
AND ADMINISTRATION OF SCHOOLS

VOL. VI  
No. 2

AUGUST  
1930



Published by THE NATION'S SCHOOLS PUBLISHING CO., Chicago.

PROPERTY OF



*Crane laboratory sink, C6880*

## Choosing a source for plumbing materials— differs little from choosing an architect

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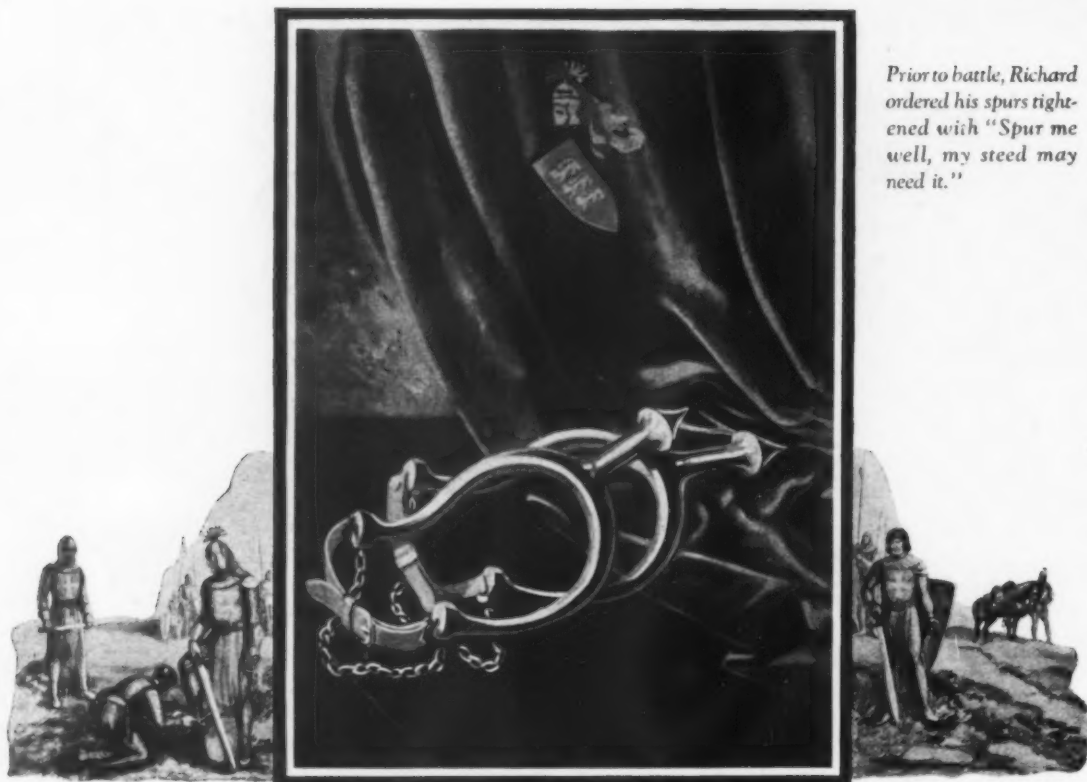
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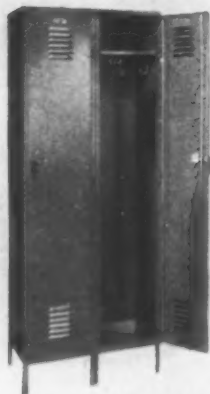
Spurs of Richard. Painted by Ludwig Gasmer

Prior to battle, Richard ordered his spurs tightened with "Spur me well, my steed may need it."

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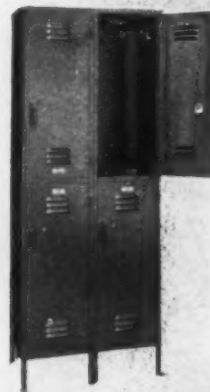
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FOLDING CHAIR



DOUBLE TIER LOCKER

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Published on the fifteenth of each month by  
THE NATION'S SCHOOLS PUBLISHING CO.

Member Audit Bureau of Circulations

President, OTHO F. BALL Secretary, STANLEY R. CLAGUE Treasurer, J. G. STARRETT

919 NORTH MICHIGAN, CHICAGO—Telephone, Superior 6402

NEW YORK OFFICE—11 West 42nd Street. Telephone, Longacre 6591

SUBSCRIPTION RATES—Domestic, \$2.00. Canada and Foreign, \$2.50. Single copies (current), 25c. Back copies, 50c. Domestic rates include United States and possessions.

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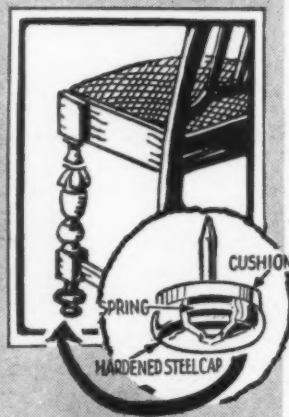
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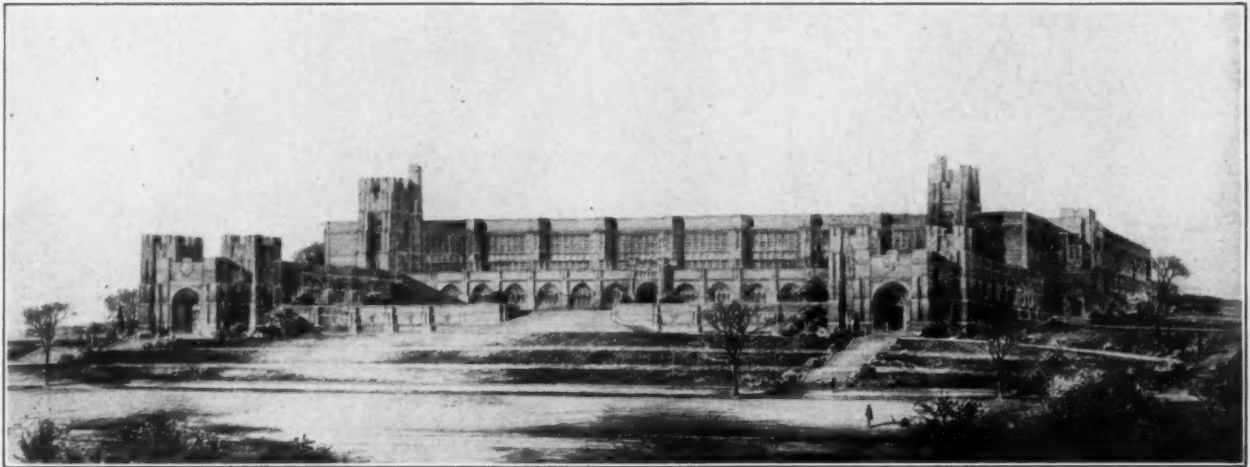
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*A Bloxonend Floor in the gymnasium of the Washington Junior High School, Pontiac, Mich.  
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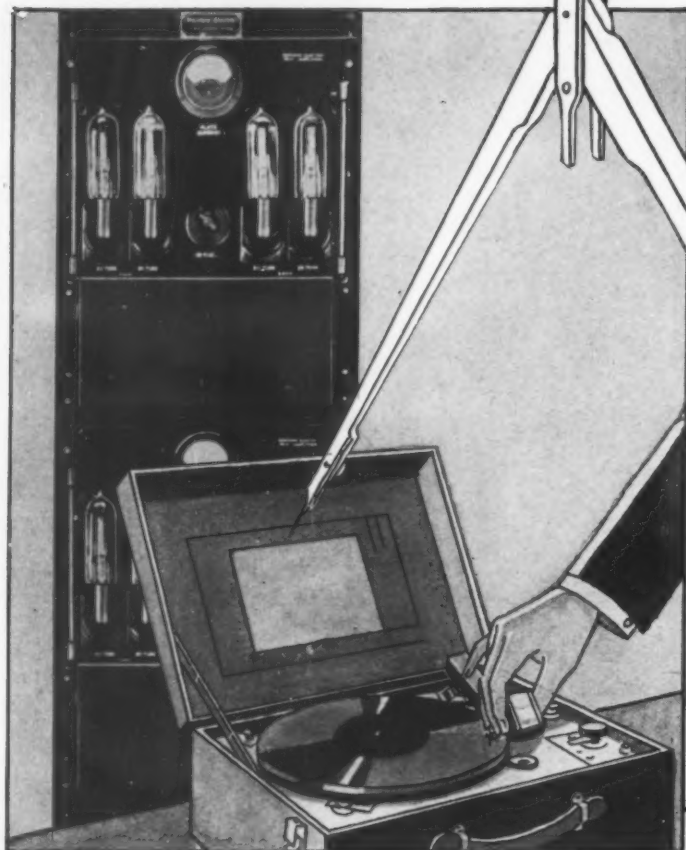


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*back, showing grain*

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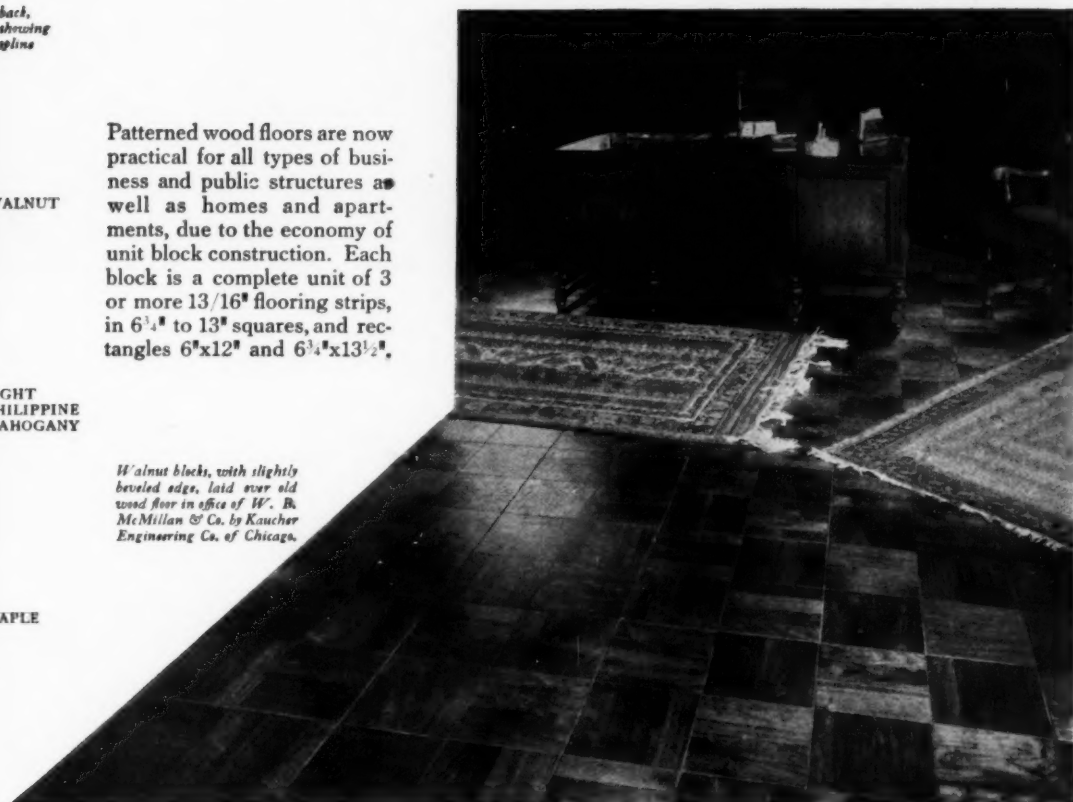
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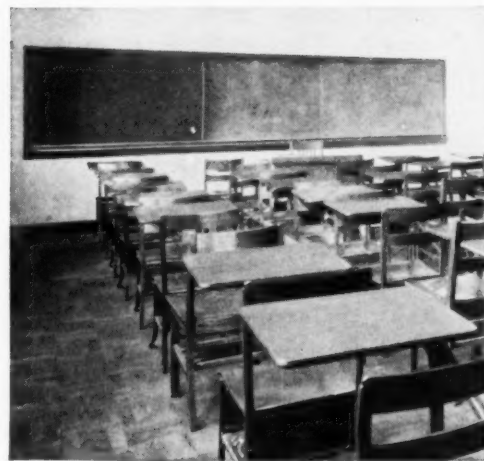
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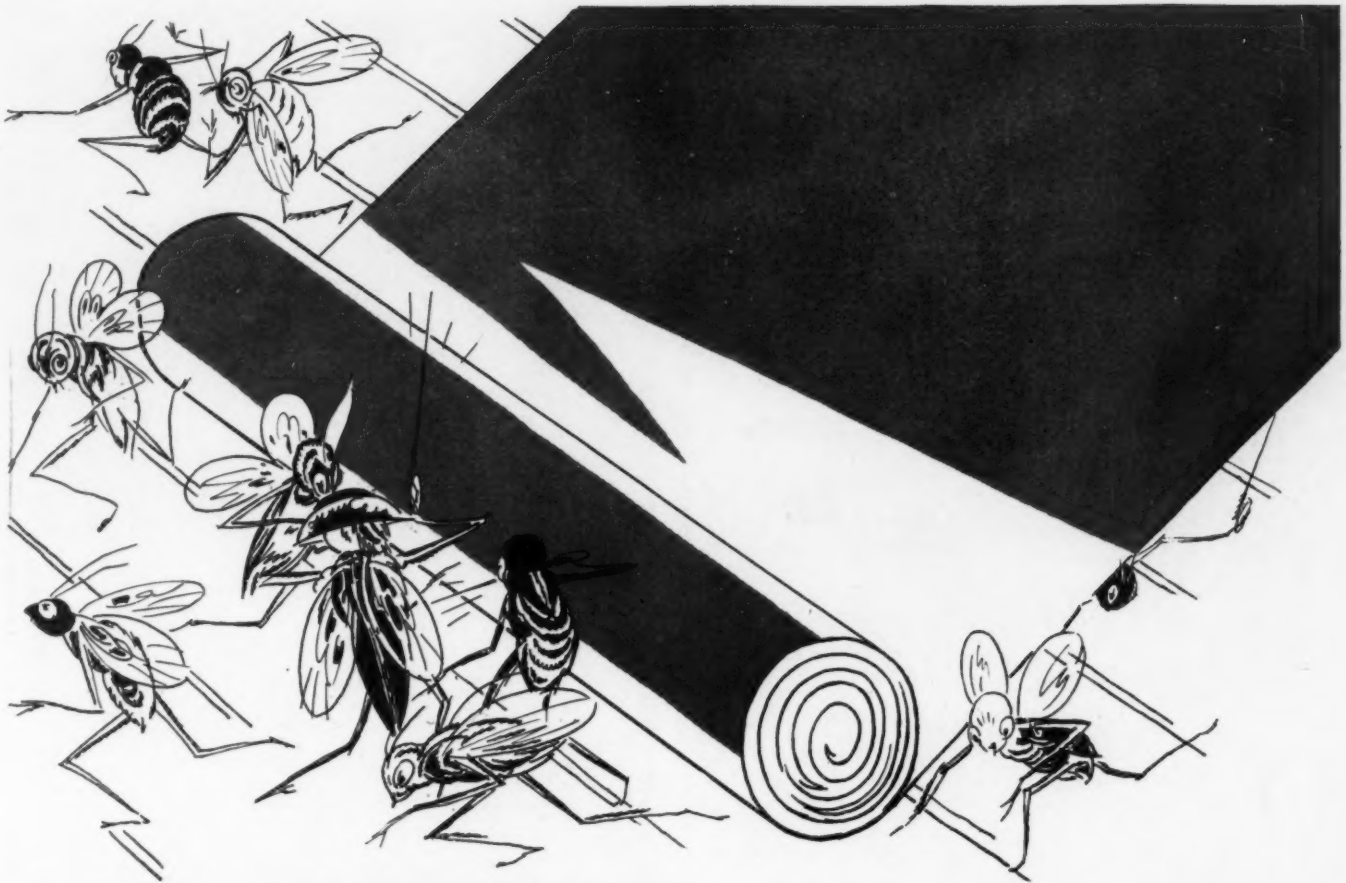
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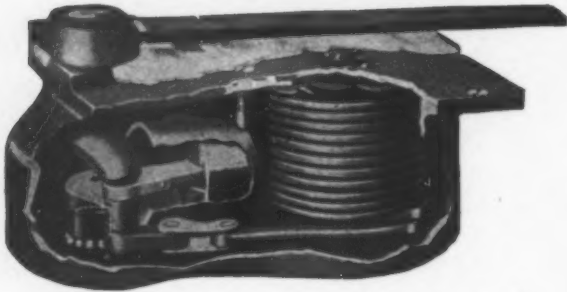


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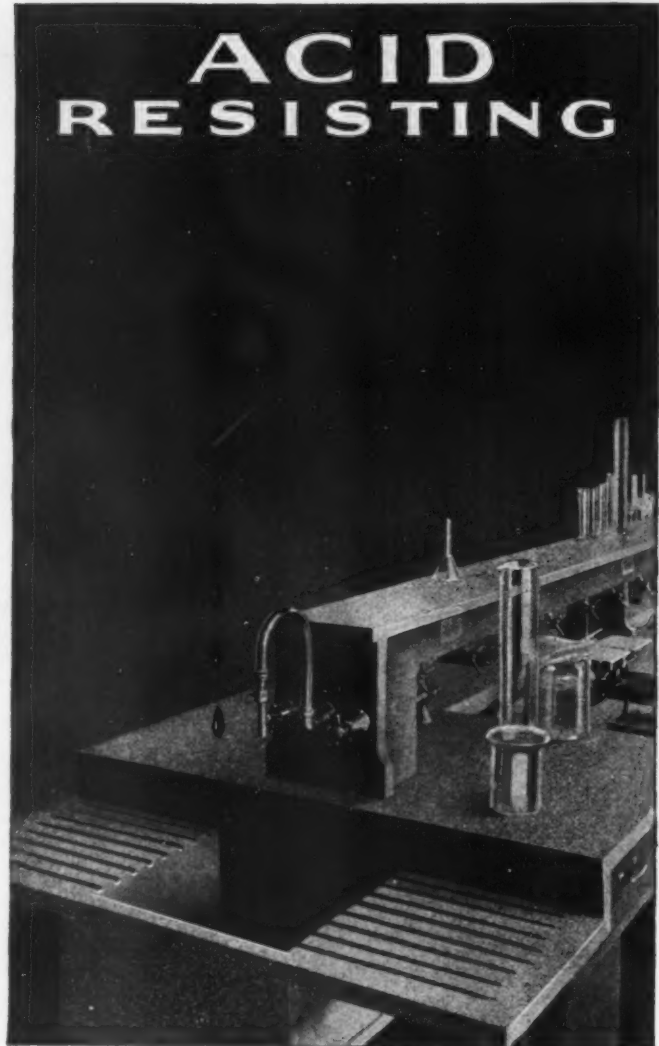
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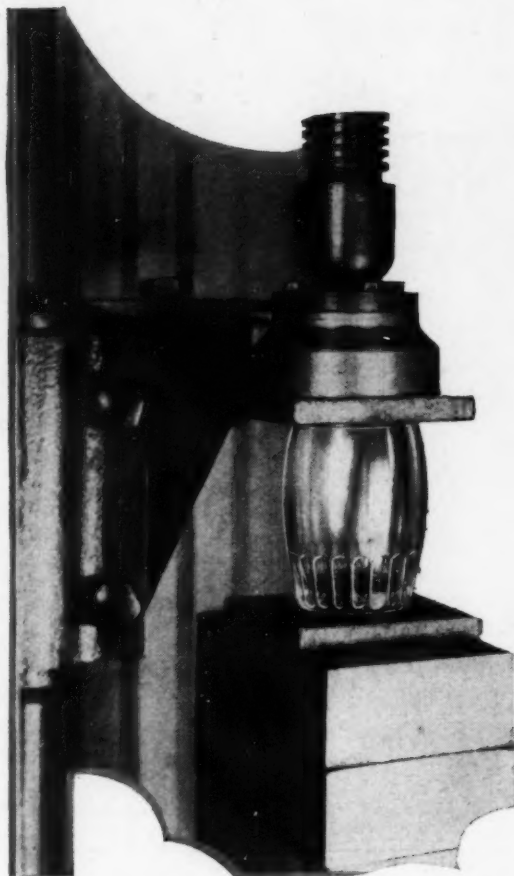
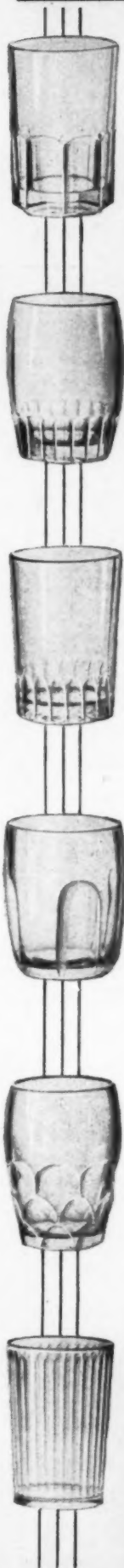
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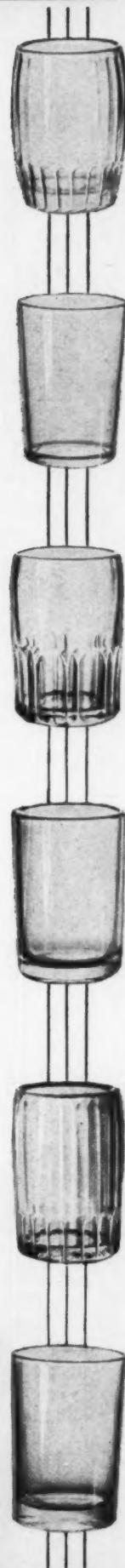


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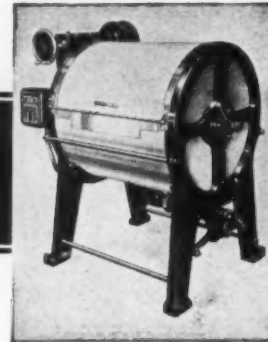
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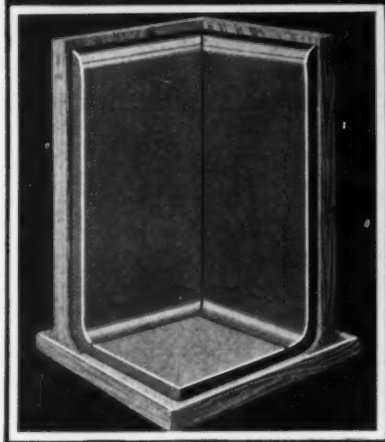
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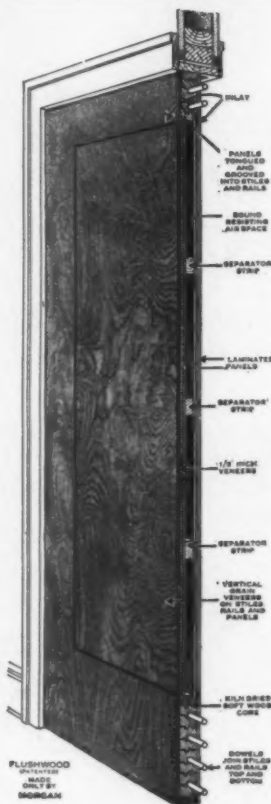
*Oakite Service Men, cleaning specialists, are located in the leading industrial centers of U. S. and Canada*

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DOOR**

The ever-increasing popularity of FLUSHWOOD has proven that school builders everywhere understand and appreciate the soundness of its design and the advantages which it offers.

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It will pay you to get the facts on this modern, economical method of seating.

Write for free trial sample chair, prices and valuable information for schools.

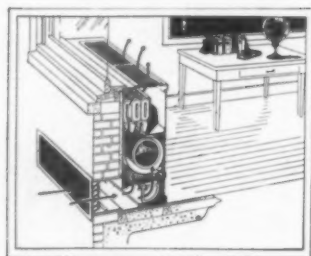
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ROYAL METAL  
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Will classroom air undo vacation's benefit... when they come back to school?



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Now, while they're out in the open, building up their health, build health into their classrooms. See how other schools... all over the country... have done it. Catalog 361 will show you... it would be a pleasure to send you a copy.



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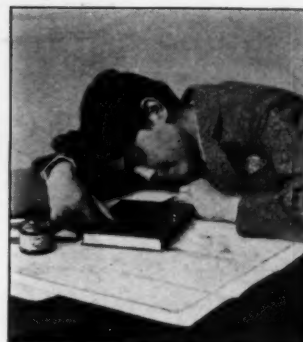
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SUPPLIES OUTDOOR AIR ~ FILTERED CLEAN ~ AND TEMPERED



# TIRED AT NOON

*..cork can lessen the tension on that highly-strung young nervous system*



*Don't blame the pupil; blame the poor acoustics.*



*Armstrong's Corkoustic is easily and directly applied to ceilings and walls.*

HE ATTENDS early morning exercises in the auditorium . . . strains to hear words and music . . . unconsciously tries to ignore echoes and reverberations . . . goes to classrooms . . . wonders what teacher, facing the blackboard, is saying . . . wonders why he hears, so distinctly, pencils dropped and whispers murmured across the room . . . tries to ward off that noon feeling of tiredness and lassitude.

Educators sometimes forget that the human bundle of energy is delivered into their hands at an age when the nervous system is most highly strung.

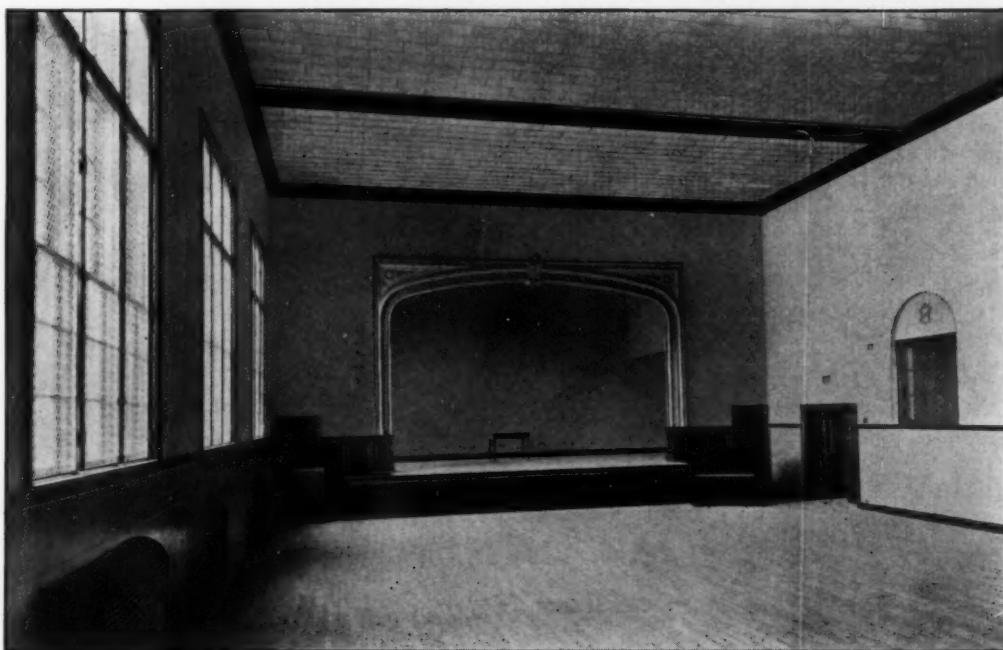
With Armstrong's Corkoustic, applied directly to ceilings and walls, hearing is made easy. Noise is muffled. The firm, strong cork panels permanently prevent echoes and other air-borne sounds. The pupils' mental energy can be devoted to study and recitation.

Armstrong's  
  
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Armstrong's Corkoustic is also a benefit to physical health. Since cork is the finest insulator, the passage of heat is effectively retarded. Rooms are warmer in winter, cooler in summer. Comfort is always present. There is an annual fuel saving that interests school building committees.

Many school architects also favor Corkoustic because of its decorative possibilities. They know that the cork panels can be sprayed with cold-water-paint coats in stencilled designs without hurting the acoustical properties. And for rooms that don't need color, the natural Corkoustic surface in blended browns assures a pleasant, quiet appearance.

For complete details we'll send you the book, "Acoustical Correction." Don't hesitate to call on Armstrong engineers for special information and recommendations. Armstrong Cork & Insulation Company, 939 Concord Street, Lancaster, Penna.



*Auditorium of Stedman School, Denver, Col.; acoustically treated at the ceiling with corkoustic, 2" thickness; architect —G. L. Bettcher.*

## Armstrong's Corkoustic

*the sound quieting and acoustical treatment for schools*

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MAPLE AVENUE SCHOOL, TERRE HAUTE, INDIANA

Architects: George Stoner & Co., Terre Haute, Indiana

Engineer: R. A. Stuart, Terre Haute, Indiana

Heating Contractor: O'Laughlin Bros., Terre Haute, Indiana



Notice the intake openings under the windows in the picture above? That is where the fresh outdoor air is drawn into the class rooms. These openings indicate that the health of pupils and teachers has been given prime consideration by the Architect and the School Board.

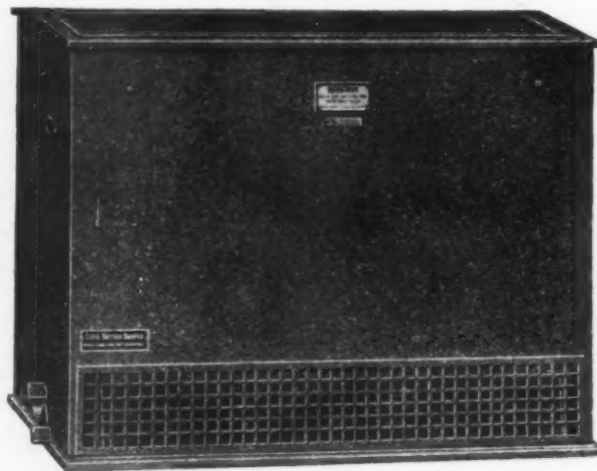


See the Buckeye Heatovent under the windows? This unit assures the pupils and teacher, who spend half of their waking hours in this room, of a continuous supply of fresh, blood purifying, properly warmed air.

In the Auditorium it is especially necessary that a sufficient volume of fresh air be supplied, for here will gather a large number of pupils. The larger the number people in a room, the greater the need for fresh, filtered, life giving air.

Fresh Air~ Filtered Air~  
Warmed Air~ Diffused Air  
Supplied by

**BUCKEYE Heatovent Units**



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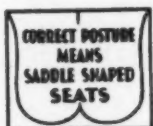
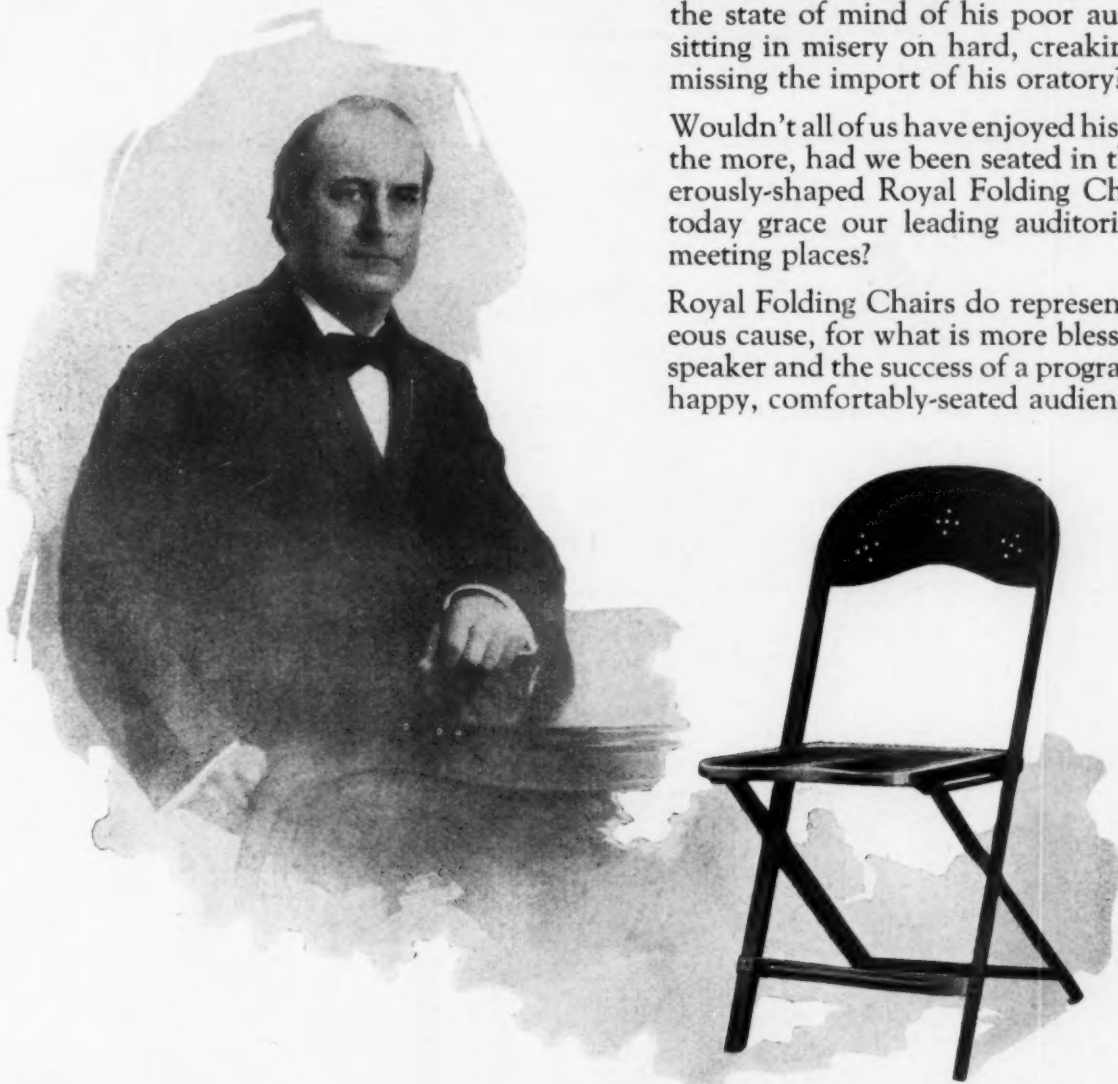
**"The humblest citizen, clad in armour of a righteous cause, is stronger than all the hosts of error."**

—William Jennings Bryan

WHEN the silver-tongued Mr. Bryan uttered these stirring words, who can say that he was not unconsciously referring to the state of mind of his poor audience — sitting in misery on hard, creaking chairs, missing the import of his oratory?

Wouldn't all of us have enjoyed his messages the more, had we been seated in those generously-shaped Royal Folding Chairs that today grace our leading auditoriums and meeting places?

Royal Folding Chairs do represent a righteous cause, for what is more blessed to the speaker and the success of a program than a happy, comfortably-seated audience?



Seats of saddle-shaped steel, wood slat seats, wood veneer or upholstered.

Noiseless rubber or glider feet. Supplied singly or in sections of two or more chairs, as required.

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*"Another Lifetime Chair"*

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**Manufacturing Company**  
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# The NATION'S SCHOOLS

DEVOTED TO THE APPLICATION OF RESEARCH TO  
THE BUILDING, EQUIPMENT AND ADMINISTRATION OF SCHOOLS

VOLUME VI

AUGUST, 1930

NUMBER 2

## Preparing Student Teachers in Subject Matter

*Teacher training institutions are steadily advancing their requirements in the interest of higher scholarship that their graduates may be "students of all arts and masters of one"*

By CALVIN O. DAVIS, PROFESSOR OF SECONDARY EDUCATION, UNIVERSITY OF MICHIGAN, ANN ARBOR

EVERY employing agency is desirous of securing teachers who are adequately prepared. Adequate preparation is, however, a matter of standards. It depends on many factors. It is different in one section of the country from what it is in another. It varies with communities, with schools, with grades of work and with subjects of study. What is adequate preparation under one set of circumstances may be inadequate preparation under other sets of circumstances.

The problem of adequacy of preparation in subject matter, therefore, really breaks itself up into several constituent problems. Indeed, so far as the preparation of high school teachers is concerned, the problem is really one of nicely balancing general preparation against special preparation and of ensuring an adequate amount of each in combination. For surely to-day no administrator is content with teachers who are, in the one case, narrow unsympathetic specialists, or who are, in the other case, Jacks-of-all-trades and masters of none. For administrators know that the teacher who is interested in his own specialty only is not in fact a real master of that specialty. Mastery connotes understanding a thing both when it is abstracted and isolated and when it is combined and related to other things.

The problem of the adequate preparation of

teachers in subject matter is therefore the old, old one of liberal *versus* vocational culture. Clearly, neither can wisely be neglected. Liberal culture is general in its scope and broad in its applications; vocational culture is specializing in its content and restricted in its relationships. The one "looks to the widening of vision, the deepening of the general understanding, the actualizing of one's potential powers, the full-orbed expansion and maintenance of the personality, the harnessing up of native interests, the development of enthusiasms and ideals; or briefly, the full humanization of the individual."<sup>1</sup>

On the other hand, vocational culture seeks to equip a prospective teacher with a mass of specialized knowledge, to make him familiar with the laws and forms that explain that knowledge and to train him to become a fair master of the tools and the processes by which he may interpret and present it to others. These two types of training in combination, liberal culture and vocational culture, produce professional equipment which, at its best, signifies an appreciation of many branches of learning and a mastery of one of them. It is thus the conversion of the old adage, "A Jack-of-all-trades and a master of none," into "A student of all arts and a master of one."

Now of a certainty, the preparation of teachers

<sup>1</sup> Bobbitt, F. A., *The Curriculum*, p. 1.

in subject matter has been constantly improving for several years. A generation ago it was common for individuals to secure positions in public high schools with only two years of training above those schools themselves. To-day a four-year college course is being demanded in all but the most unprogressive of our secondary schools. Within a decade, if signs of the times are not misread, a master's degree will alone give admittance to our larger and stronger city high school systems. Indeed, this higher standard is in effect to-day in numerous places throughout the nation. Moreover, with the available supply of prospective teachers each year in notable excess of the teaching positions made vacant, as has been the case recently, there is every reason to expect that this practice will not be abandoned.

Everywhere, too, it appears, teacher training institutions are advancing their requirements in the interest of higher scholarship. In illustration of this trend, perhaps no better means may be employed than to describe the practices at present in operation in the school of education, University of Michigan. The practices found there are, I am sure, similar in principle, if not in forms, to those to be found in many other teacher training colleges.

In the school of education at the University of Michigan provision is made for the admission of two types of students—those who enter upon what are called special curricula and those who enter upon the general curriculum. The former include courses for the training of teachers (1) in industrial education and industrial arts subjects, (2) in commercial subjects, (3) in art and design and (4) in physical education, athletics and school health. The latter or general curriculum includes courses designed to prepare students to teach in the so-called academic fields. Admission to the special curricula may be had by freshmen in college; admission to the general curriculum is limited to juniors, seniors and graduate students.

#### *Requirements for Graduation*

Once they are enrolled in the school of education, all candidates, whether they are enrolled in the general curriculum or in the special curricula, are required to complete, for graduation, a total of 124 semester hours of credit. This number is four more than the number required in the arts college and was designed as one step in raising the standards of scholarship for prospective teachers.

Students enrolled in one of the special curricula devote something like 60 per cent of their time to work centering about their special interests.

Students enrolled in the general curriculum must secure at least 100 semester hours of credit in academic subjects, and fifteen semester hours of credit in education courses. The remaining nine semester hours may be either academic or educational as the student himself may elect. Here again an effort has been made to ensure a generous amount of cultural training, with only a modicum of strictly professional training during the period of undergraduate days.

#### *A Balance of Interests Is Sought*

Once again, in regulating the strictly academic work that the general student may pursue, an attempt has been made to guarantee a fair balance of interests. Thus, of the 100 or 109 semester hours that a student must offer from academic fields, six must be in freshman rhetoric and twelve must be in each of the three large divisions of learning—languages and literature, mathematics and science, and the social studies and arts. These prescriptions, therefore, account for 57 of the 124 semester hours required for graduation—rhetoric, 6; group requirements, 36, and education, 15.

But there are still other requirements. No student preparing himself for a high school position is graduated and certificated unless he has majored in one specified field of academic work and has minored in a second specified field of academic work. A third field of specialization is advised but not prescribed. The minimum number of semester hours accepted for a major is 25; the maximum is 40. The minimum number of hours for a minor is 15; the maximum, 23. Here once more, it is seen, an effort has been made to retain a fair balance between liberal culture and academic specialization.

But the faculty of the school of education has gone even further to ensure high attainments on the part of its graduates. In addition to the 124 semester hours of credit that each student must present for graduation, his record must also show 25 per cent more honor points than the number of hours' credit earned, or a minimum of 155 points. These honor points depend on the term marks or grades that a student receives in his several courses pursued each semester. Thus, a mark of A (the highest mark) yields three honor points for each semester hour of credit secured in a given course. A mark of B yields two honor points; a mark of C, one honor point; a mark of D, no honor point, and a mark of E (the lowest mark), a negative honor point per semester hour assigned to the course pursued. It is, therefore, not alone the quantity but also the quality of work a student does that determines whether or



not he shall receive the faculty recommendation to teach.

Beginning in September, 1930, one additional provision for safeguarding the teaching profession is to go into effect in the University of Michigan. This is the requirement that every candidate for the teacher's certificate shall, at the beginning of his senior year, pass a comprehensive examination covering all phases of the work he has studied either in connection with his teaching major or his teaching minor subject. If this examination reveals gaps in his training he is required to pursue certain additional specified courses. A similar comprehensive examination covering the required work in the field of education is likewise to be set for each candidate just before the close of his senior year.

In summary therefore it may be said that the school of education at the University of Michigan is endeavoring to guarantee for its candidates adequate training in subject matter by insisting upon the following standards:

1. At least 124 semester hours of credit for graduation instead of the customary 120 hours.
2. At least 100 semester hours of credit in cultural academic subjects.
3. Specialization in at least two fields of academic learning, one, a major field, comprising from 25 to 40 semester hours; another, a minor field, comprising from 15 to 23 semester hours.
4. The distribution of at least 36 semester hours of credit over the three great divisions of learning—languages and literature, sciences and mathematics, the social studies and art.
5. A consistently high grade of scholarship throughout a student's college course, this fact being evidenced, first, by term marks that are at least 25 per cent higher than the average mark given out and, second, by passing a comprehensive examination covering the whole field of his major or minor work.

#### *What Standardizing Agencies Are Doing*

Besides the teachers' colleges other agencies that are aiding in securing more adequate preparation of teachers are the regional standardizing associations. For example, the North Central Association of Colleges and Secondary Schools has recently promulgated a standard whereby schools will be denied accrediting if they assign to teachers work that lies outside of the fields of their major or minor specialization. Here, indeed, is a stroke at the very roots of the evil. For, although teacher training institutions may set high standards of attainment for students in their subject matter courses of specialization, it boots little if employing agencies ignore these

efforts and assign work to teachers in an indiscriminate manner. It is of course recognized that the exigencies of administration often make it exceedingly difficult to distribute school work in an idealistic fashion. Flexibility of action must therefore not be wholly denied administrative officers. Nevertheless, if the blanket form of a teacher's certificate were completely abolished and all credentials were made specific and limited, a nearer approach to the desired goal would surely be made.

#### *Conditions That Need to Be Met*

Particularly bad is the situation to-day in many of our rural and village high schools. These schools are often too small in pupil enrollment to permit them to offer a wide range of subject matter and hence they are not able fully to departmentalize the work of instruction. In consequence, administrative necessity frequently requires teachers to spread their energies over ranges of subjects for which they have had little or no specific preparation. Nor is this condition likely to be uprooted until large consolidated schools take the places of the weak and small existing schools.

Thus it appears that adequate preparation in subject matter may be expected of teachers in service when the following conditions are met: when teacher training institutions require higher attainments for graduation; when the states abolish all forms of blanket certificates and in their stead issue only specific and limited credentials requiring, among other things, that the candidates shall teach only what they have specifically been trained to teach; when, through consolidation of districts and the raising of more ample school funds, the actual practical conditions of small units are made more nearly like those of large and wealthy districts.

Now after this rather lengthy discussion of the more general issues, let us return to the specific theme of the paper: how to secure adequate preparation of student teachers in subject matter. It seems to me, however, that the answer has already been given. For, as I have stated elsewhere, if students in training are held to high standards for graduation they must inevitably be approximating those standards at the time they are permitted to engage in cadet teaching. This surely is true if the cadet teaching is postponed to the latest feasible period in the student's college course. Obviously this should be the rule.

The entire question of cadet teaching is, as we all know, a delicate one. Parents generally do not like the idea of having their children practiced or experimented upon. They rebel openly

if this is done by immature and unskillful workmen. Since, too, the regular teachers in a teacher training school are expected to be, and usually are notably superior teachers, the contrast between them and the poorly prepared novices is conspicuous indeed. Hence, unusual care must be taken to see that the novices are not only fitted in general for their tasks but fitted also in specific ways for each lesson that is taught. Having each one prepare lesson plans helps greatly. Having each one go over these plans with the supervisor, at length and in rather minute detail, will also help. But having one prepare himself specifically in the subject matter of each particular lesson, just previous to teaching the class, will yield the best results.

Certainly a cadet teacher ought not to be expected to do less in this respect than an experienced teacher. Moreover, there is considerable evidence to show that, with rare exceptions, the best teachers are the ones who devote much time and thought to getting ready to do the job.

I have in mind at present one of my colleagues, a professor in the law school, who knows his law as thoroughly, no doubt, as the best trained men of that field. At this very time, he is, however, spending eight hours a day in freshly preparing himself to teach a new course in his old familiar field. Shall immature cadets not take inspiration from such examples and be guided by the practices of such men?

May I again draw upon my own institution for materials to illustrate my points? We, in the school of education at the University of Michigan, do not permit student teaching to be done until late in the senior year, preferably in the second semester. Further, this teaching is always confined to the student's major or minor field of specialization. The candidate will therefore, in all probability, have completed more than three-fourths of the required work outlined for his major and minor divisions and will simultaneously be pursuing other courses in those fields.

#### *Coordinating Theory and Practice*

Further, at the same time the cadet is undertaking his practice teaching he is required to pursue a three-hour course in special methods related directly to his teaching work. Hence he is, from another angle and in another way, also getting a certain amount of content preparation in the subject he is teaching.

It may be argued, of course, that 25 to 40 semester hours devoted to one's major field are wholly inadequate. Such may be the case. There is however no scientific evidence yet discovered that either denies or affirms it. The time may

come, and seemingly is fast coming, when, as has been stated, a master's degree will be required for admission to the teaching corps of our best high schools. If such is the case, professional study can then, for the most part, be postponed to the graduate year. Here then would be given the course in practice teaching and it would presuppose a more extensive and more thorough familiarity with the subject matter that is to be taught as a cadet teacher. Until that time arrives, however, little more, it seems to me, can be done than I have outlined.

### Radio Makes Better Training in Speech Imperative

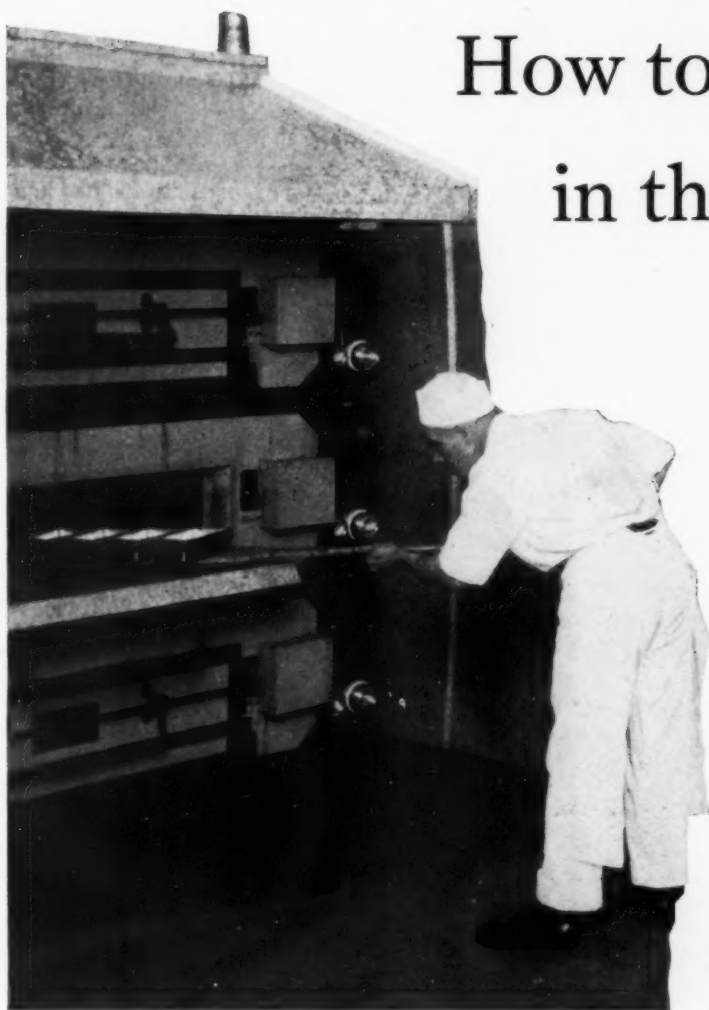
Because of the wide scope given the human voice by means of radio, in an age that regards oratory as a shallow and artificial attempt to appeal to emotion rather than to the intellect, fundamental training in public speaking is desirable, the secretary of the interior, Ray Lyman Wilbur, declared in an address recently.

Doctor Wilbur spoke under the auspices of the national oratorical contest which was sponsored by approximately thirty American newspapers for the purpose of selecting from winners of regional contests the national orator who will represent the United States in the fifth international contest.

Doctor Wilbur pointed out that the mechanical adjustment of the voice to the microphone and other apparatus of radio required greater preparation for speaking, and that "buncombe over the radio sounds like buncombe," hence it is necessary to appeal to the intellect while speaking to an unseen audience.

"With our increasing knowledge of the world about us," he said, "we find that our intellectual apparatus, if well trained, can be depended upon for its decisions more than our emotional nervous system when it is stirred by oratory. While we are now convinced that we cannot safely trust the future of our country to oratory, exposition and the properly and orderly presentation of facts can be of very great service in the mass decisions which we have to make.

"Throughout the whole history of the human race until the last decade, the old phrase 'within the sound of my voice' meant that the limits were very narrow for the orator. The printed word carried much farther. But to-day, with the radio, it is possible for the voice to have a national, if not a worldwide, scope. This makes it more incumbent upon us than ever to see that those who are to speak to us have a sound fundamental training."



# How to Avoid Friction in the Pursuit of Vocational Education

BY H. W. PAINE,

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UNIVERSITY OF TOLEDO

I shall briefly list what seem to me to be the most frequent causes of friction between the vocational and academic concepts of education. By vocational education I mean the Smith-Hughes type of education, and by academic education I mean the type of general education found in our secondary schools.

The three chief causes of friction are: (1) misconception on the part of school administrators of what vocational education is really trying to do; (2) lack of proper methods of selection of pupils for vocational courses; (3) lack of proper housing and inefficient administration of vocational programs, especially in smaller communities.

The definition of vocational education given by the Federal Board for Vocational Education seems clear, but evidently it is misunderstood in many quarters or at least is subject to varying interpretations by administrators. According to this definition, true vocational education must be designed to do one or more of three things:

1. To assist individuals already employed in trade and industrial occupations to add to the special knowledge and skill pertaining to their work.

2. To prepare individuals for profitable and advantageous entrance into the mechanical trade or industrial pursuits with known marketable assets in the way of special knowledge and skill.

3. To assist employed minors in adjusting themselves to the existing order through such

**W**E HAVE always with us those who continually emphasize the possibility and probability of conflicts. They see the United States and Europe at war, the white race and the yellow race at grips, the possibility of war between capital and labor, between Protestants and Catholics, and I think it was Will Rogers who predicted that the next war would be "between the truck drivers and the rest of us."

We have a few educators who firmly believe that there will be war between vocational education and academic education. They can clearly see the causes for conflict but are totally blind to the simple steps that would remove them.

These cheerful pessimists are not without value. They point out a lack of understanding of the other fellow's problems and viewpoints and the existence of certain undesirable contacts causing irritation between active educational forces. If they do nothing more, they point out the need of applying a little oil of humor and lubricant of common sense to situations too often treated only from the viewpoints of pride and prestige of organizations or of individuals.

PROPERTY OF

GRAND HAVEN PUBLIC SCHOOLS



types of education as are properly given in the general continuation school.<sup>1</sup>

These objectives should need no explanation, but we find school administrators worrying over the difficulty of graduating vocational pupils with enough credits for college entrance. I hold that vocational education is not in the least concerned with college entrance, but rather with having its graduates enter into and succeed in the mechanical trades and industrial pursuits. Vocational education rightfully concerns itself with the giving of trade skills and knowledge, not college entrance diplomas. The Smith-Hughes act provides for education to train persons "for profitable and efficient employment whether in agriculture, trade and industry, or home economics." Why not recognize these objectives and grant vocational certificates, as many of our schools are doing?

If the above philosophy is accepted, it obviously follows that we must be more careful in the selection of pupils for our vocational courses

so as to eliminate those whose primary object in schooling is preparation for arts colleges. Obviously, a college preparatory course is the most efficient means of preparation for college entrance, just as vocational education is the most efficient preparation for our skilled trades. It seems that only a slight amount of selection would accomplish the elimination of the arts college entrants for, according to recent Office of Education estimates, less than 35 per cent of our eighth grade pupils graduate from high school and less than 25 per cent of these pupils ever enter college. Basing the estimate on ninth grade pupils, less than 41 per cent graduate and less than 30 per cent ever enter college. Approximately only 27 per cent of those who enter college graduate. Placing these eighth and ninth grade pupils upon a percentage basis of probable graduation from college, less than 7 per cent of the eighth grade pupils and approximately 8 per cent of the ninth grade pupils will complete college courses.

From these figures, therefore, it appears that random selection of eighth grade pupils would reveal less than 25 per cent of college material, and

<sup>1</sup> Page 10, Federal Bulletin No. 17, Trade and Industrial Education, Trade and Industrial Series No. 1.



*These pupils are learning typing, which will fit them for a definite vocation.*

*In the sheet metal shop of a junior high school, these boys are being taught a trade.*



work, such as drawing and shop practice, he will have an advantage over the regular high school graduate. If the vocational school accepts eighth grade graduates for its two or three year training program, the pupils who decide later to enter engineering colleges will usually find ample time to make up the credits that are lacking so as to enter the school of their choice without delay.

An item of much greater importance in the selection of vocational pupils as far as friction between our vocational departments and our departments of cultural education is

concerned is the selection by intelligence quotients or the using of the vocational department as a place to put pupils who are failing in the regular school work or in matters of discipline. Vocational instructors feel, perhaps unjustly in some instances, that there is a tendency to use their departments as a dumping ground for the refuse from the regular school system, or as Dr. A. H. Edgerton so aptly put it, to use their department as an "educational wastebasket." That is, if Johnny has had trouble in all his classes, has failed

random selection of ninth grade pupils would reveal less than 30 per cent of college entrance material. With this small group eliminated by careful guidance and selection, our vocational program can proceed directly toward its objective, namely, training for entrance into the vocations.

However, in spite of our best guidance efforts, we may find that there are a few individuals in our vocational classes who will eventually enter arts colleges and every facility should be provided to allow them to return to college preparatory classes as soon as they are discovered. This should be the case particularly with pupils who expect to take up arts, law or medical courses, since vocational classes properly conducted will not be of much direct benefit to this group.

The engineering college entrant, for instance, may find that he is short a few credits which will have to be made up in the regular schools of the system before he enters college. On the other hand, he will find that along certain lines of

miserably in everything, or has a low intelligence quotient, he should be inducted into vocational work at once. He cannot use his head, hence, he must be able to use his hands. He is a total loss academically, therefore he must be "mechanically minded."

The last assumption is as illogical as asserting that there must be oil under a certain piece of land because it is not good for anything else. There may or may not be oil under such land. Likewise, Johnny's success or failure in vocational work depends upon other factors than his failure academically or the trouble he gives his teachers.

Again quoting from Federal Bulletin No. 17, page 94, "Vocational education is intended for those who have made an intelligent vocational choice or for those who wish to extend their vocational knowledge. . . . This excludes instruction to backward, deficient, incorrigible or otherwise subnormal individuals as such." Also, "The dominant purpose of the Vocational Education

Act is plainly to promote the national welfare by aiding normal citizens to increase their own and the general well-being through various forms of vocational education."

Vocational education is an expensive tool. Its classes should never be used as a safety valve for academic classes or as a parking place for the undesirables of other groups. If it is found necessary to form classes for these types of pupils, the need should be met honestly and squarely, but they should be kept separate from the regular vocational classes. The training should have other objectives than that of producing skilled tradesmen, and these objectives should be realized through a far less expensive type of organization.

This brings us to the last points of conflict in our vocational-academic arena which are probably the most vital of all. They concern the matters of housing the vocational units and the delegation of responsibility for the administration of the vocational program.

If it is at all possible, even in our smaller centers, the vocational work should be housed separately from the other school activities. The basement of a junior or a senior high school is no place for vocational work, if any other location can be found. The vocational department is a separate school. It has distinctly different goals and procedures and a different philosophy. Hence, the housing of this work under the same roof with general academic education is bound to cause friction between instructors of these two groups, between pupils, between the coordinator in charge of the vocational work on the one hand and the principal and teachers in charge of the academic work on the other.

#### *Cultural Versus Vocational Education*

As a general rule, friction is certain to develop during the first year. Once started it usually increases and becomes extremely unpleasant. Frequently we find that the principal does not possess a sympathetic attitude toward the vocational department. Why should he? His educational background and experience have been academic and he honestly believes that cultural college preparatory school objectives are the only right ones. He thinks in cultural not vocational terms, and he regards the vocational program as an attempt by defiling vandals to debauch the Goddess of Education by making her the handmaiden of commerce and industry.

I know of one instance in which a principal was largely instrumental in having the regular high school academic courses in geometry substituted for the vocational courses in related ma-

chine shop mathematics on the grounds that these machinists needed some geometry anyhow, and college entrance credit could be given for geometry, but not for related mathematics.

On the other hand, this lack of understanding no doubt is often due to the attitude of the person in charge of the vocational program, but the surest method of preventing friction is to separate the vocational work from the rest of the school. As has been stated before, it is really a separate type of education and should be treated as such. In this ideal set-up, the coordinator in charge will be directly responsible to the superintendent of schools for the work of his department. The practice followed in many of our smaller communities of making the coordinator partially or wholly responsible to a principal of a building, who in turn is responsible to the superintendent of schools, is often the cause of a great deal of unnecessary trouble between departments.

#### *How Friction May Be Avoided*

All school administrators should have a more thorough understanding of the purposes and policies of the Smith-Hughes vocational program. We should develop far more intelligent methods of selecting pupils for this type of work, the selection being based upon interests, aptitudes and intelligence, not upon expediency, incorrigibility or dullness. In this work of guidance and selection, industrial arts departments can give invaluable assistance to the prospective vocational pupil and to the vocational school by means of closely supervised try-out courses. We should provide separate buildings in even our smaller centers for vocational work, making the coordinator or director in charge directly responsible to the superintendent of schools for the success or failure of his program.

Finally, since the supreme test of the effectiveness of vocational education is the placement of its pupils in industry and their success therein, the coordinator or director in charge, even in the smallest vocational programs, should have ample time to make contacts with industry in order to secure its cooperation in his task of training and placement.

By attention to details such as these, a city school administrator can ensure a smoothly running, efficient vocational program, unhampered by petty conflicts over authority and rank. His entire system will benefit. He will actually have lubricated the administrative bearings of his academic and vocational program and will be well on the road to securing efficient functioning of these two important educational forces.



# Saving School Children From the Hand of the Law

*The legal and the social-educational processes of treatment for behavior problems are here contrasted and their interrelations in child welfare and in the treatment of delinquency are pointed out*

BY PROF. THOMAS D. ELIOT, NORTHWESTERN UNIVERSITY, EVANSTON, ILL.

IT IS a historical accident that separates the schools from social work. Like many other normal services for disadvantaged groups, schools were started under philanthropic auspices, and gifts thereto are still exempt from taxation.

Every college student is as truly a recipient of charitable subsidy, from the public and from the faculty, as are the beneficiaries of settlement work or the consumers of sweated products. But when philanthropy succeeds in demonstrating the universal desirability of a service, the public demands it for all and eventually takes it for granted. When it thus takes its place as part of the community standard of living, it ceases to be called social work. This is now true of schools and of playgrounds and is coming to be true of health centers.

When social workers undertake to develop new services in connection with such institutions as schools, they are merely repeating a process already familiar in the history of social work.

I wish that the separation between "schooling" and social work had never occurred, that we might consider social case work and the schools as parts of a larger unity, the educational system of the community, in which would be included not only the regimented curricula and the brick and blackboards, but all the more individualized services for the adjustment of young and old.

## *The Home Is Delegating Its Functions*

Our perspective may be further adjusted by remembering that the work of the schools and of the other social agencies replaces services previously performed in the home, and still performed by many families for their children.

Father Cooper and Prof. William F. Ogburn have pointed out the casting off of traditional home functions by the family and their absorption by industry and by specialized agencies, but while Father Cooper views this tendency with alarm, Professor Ogburn observes it with complacency.

Schools and the social agencies are protesting that they do not wish to relieve or deprive the home of its obligations or functions, and perhaps this doctrine is nowhere more apparent than in the philosophy of the visiting teacher, the social worker *par excellence* of the schools. Perhaps the division of labor between schooling and social work can best be worked out in the light of this situation, and with a purpose of aiding the home in the rearing of the child.

## *Coordinating Education and the Home*

The home will probably never again monopolize education, health, recreation, employment and moral control, but its essential social functions, those of the conditioning of the affections and the shaping of personality, can be accomplished only through the efficient coordination of educational and welfare agencies with the home.

The cure of delinquency was launched as charity and social work. It was and still is largely identified with the legal process—with courts and the police. The old name "National Conference of Charities and Corrections" is witness to this.

My object here is to contrast this legal process with the social-educational processes and to point out briefly their interrelations in child welfare and especially in the prevention of delinquency.

Legal process, of course, is part of social process in the broadest sense, but social interaction, adjustment and maladjustment are going on everywhere and legal process is only a narrowly restricted field compared with the total life experience of most persons. Most social work is nonlegal and noncompulsory. It belongs to social process in general rather than to legal process. Most educational work is also noncompulsory. Indeed, compulsory and education are almost contradictory terms.

Nevertheless, probation and the work of the best prisons and reform schools are social-educational processes under legal compulsion. The contrast between the two can be illustrated by

the distinction between probation as a legal status and as a social process of child guidance.

Social workers and teachers should and do carry on their efforts as far as possible without recourse to legal process. For them, legal process is a necessary evil, a confession of failure or even, sometimes, an irksome barrier to be overcome. Mary E. Richmond considered that social case work has as one of its functions the adjustment by social-educational processes of persons inevitably maladjusted by the inelasticity of legal processes.

Part of the effort of social workers has always had to be devoted to getting the legal process so changed as to improve the social process or at least so as to interfere as little as possible with their efforts.

The following cases, studied by Enid Twist, an honors student at Pomona College, Claremont, Calif., illustrate the difference between social process and legal process:

An urge to get away and to do something different led Dick to cut his classes constantly. His father was dead. His mother was a waitress, and the boy was left almost continually alone. Life seemed to be too full of adventure and promise for this fourteen year old junior high school pupil to waste his time on school. Going to the beach, caddying at the golf club, or just hanging around town answered Dick's requirements for the time being for a good time and new experience. But as time passed these diversions proved rather tame and monotonous. So Dick tried his hand at stealing; first food, then larger articles. He was caught and is now a ward of the juvenile court.

#### *Some Examples of Delinquency*

It was this longing for new experience, to be daring, to be "big," that led this boy into delinquency. Wishing to be thought "big" indicated a feeling of inferiority, a wish for recognition as well as a wish for new experience and adventure. For it has developed that his companions were older boys who rather taunted and dared him to steal fruit from a stand. They appealed to his sense of adventure, never far from the surface, and Dick responded. Securing the fruit was fun and also was easy, and there was a certain element of recklessness involved. One thing led to another and the boy became adept at stealing.

Betty, aged fourteen, an eighth grade junior high school pupil, was brought to the attention of the supervisor of attendance for continual cutting of school. She and her friend, Ruth, were found at dance halls. The family conditions were bad, the father and mother were separated and the

mother was supposedly with a boarder. The dean of girls, the women's probation officer, and the supervisor of attendance had a sympathetic talk with the girls who promised that they would not cut school to go to the dance halls. They were also requested to report weekly to the probation office. Things went well for three months, then in November the girls had to be committed to a juvenile home following a wild party. When asked why they had broken their promise they replied in part, "You have just got to have some fun in life and we sure had it."

#### *How Legal Process Functions*

Here we see the legal or court process as a sort of turnstile, clicking for some near the beginning of the social process of their lives, for others late in a career of misbehavior. The nature, timeliness and frequency of the court procedure and disposition will, of course, affect the subsequent social process in the child's life, but it should be remembered that the lives that pass through the prism of the court come, like separate beams of light, from widely divergent directions, and the changes wrought are only a deflection in chains of social causation that are continuous, and pass on out into the social process again. For many of its clients the legal process doubtless has much of the character possessed by magic or capricious deities in the experiences of so-called primitive men.

Whether a given case is discussed and treated as a dependency case, a neglect case, a protective worker's case, a physical or mental health case, a truancy case or a delinquent case will depend upon which member of the family first reaches a stage of recognized need, what forms the breakdown takes, at what stage it occurs, and which agency happens to be most accessible at the time—a welfare agency, an educational agency, or an agency of legal compulsion and procedure. The following cases illustrate some of these points.

Katherine and John, in the seventh and ninth grades, respectively, of the Junior High School, were both reported for truancy. Inquiries showed that the father, head of a family of nine children, had been injured in 1923 while in the employ of the county road department. The county paid him \$97.50 per month until January 1, 1928, when the allowance was reduced to \$77. The father claimed inability to support the family on \$77 and the county refused to raise the allowance. Katherine and John were being kept out of school to work and the father refused to send them back to school. A complaint was sworn out charging failure to send the children to school with the hope that this would bring the



matter to an issue concerning the future compensation. Sentence was suspended, and the children returned to school. In September Katherine was again working and the father was warned. In November both children were working and the case was brought up in court. The court and the district attorney advised leniency.

Lack of financial aid in the home started Pete, an eighth grade pupil, on the road to juvenile delinquency. His attendance was irregular and his attitude was poor. He secured jobs with the three papers in town at varying intervals and admitted using the money collected for one of the papers. The paper assumed the loss and realizing the financial straits of the family refused to prosecute and stipulated that the boy return to his school for full-time attendance. Last month papers were filed in the juvenile court charging truancy, refusal to obey his parents and petty theft. The boy was committed. It seems that if the gradual restitution had been required the outcome might have been different.

The following case was due to rather unusual conditions in the home. Sam, a high school junior, was reported for cutting classes. It was found he was getting odd jobs in order that he might get money with which to buy food. It seems that the father is a diet fanatic and insists that his family, which includes six children, should follow this schedule: no breakfast; fruit and vegetables for lunch; fruit and vegetables for supper. Sam had not gained in weight for three years. He was given a job working in the high school cafeteria for his lunch and at the market on Saturdays. He gained rapidly and seemed to take an interest in his work. But he also seemed to be taking advantage of the supervisor's interest. Then he ran away from home in November and has been taken up by the police and the courts because our Anglo-Saxon culture makes this the legal thing to do.

#### *Socializing the Courts*

Legal process is far older than social work. Law is no respecter of persons. Equity procedure in courts of chancery was a mitigation of this doctrine. Social case work is the antithesis of law in this respect of persons. Education, too, is increasingly a respecter of persons. It is no wonder that social-educational processes for the cure of delinquency have been attached to the equity courts, so that juvenile courts use chancery procedure in order to leave room for social processes of treatment.

Compulsory legal processes have an indispensable place, of course, because our noncompulsory educational and social work is human and fal-

lible. It has always been my belief, however, that as much as possible of the social-educational process should be kept on a voluntary basis. Courts and police should be socialized, assuredly, but their socialization should consist in their adoption of this principle as a policy.

In the cure of delinquency, legal process is, as yet, often necessary. Compulsion must be effected through the police, the courts, detention and custody. Even in the prevention of delinquency, social work may need a court order to control some hostile factor in the situation. For the most part, however, the prevention of delinquency can and should be dissociated from legal compulsion. It should be considered a social-educational process rather than a legal process. This attitude should be so developed in the public that individuals and agencies, even the police themselves, may acquire the habit of bringing incipient delinquents not to the police station, detention home or court, even for what is known as "unofficial" court treatment, but to the social workers of the educational system, that is, to the attendance officers, if socialized, the guidance bureaus, the clinics and the visiting teachers.

#### *Preventive Measures Are Needed*

The social-educational processes underlying the prevention of delinquency are now familiar and their efficacy has been demonstrated. Even the crime commissions are accepting them. The next logical step is their greater integration for greater effectiveness. To attempt this integration under court auspices is a fatal though possible error. To absorb into the already voluntary social processes of education more of the technique and attitude of social work, and into correctional social work more of the spirit of reeducation as contrasted with that of compulsory ordering and forbidding, will increase the effectiveness of the whole social-educational system. Keeping normal children normal is a step toward the prevention of delinquency and of all other social maladjustment, whether through group work or case work. If prevention fails to prevent, then there remains the legal process to fall back upon. This does not mean that any antagonism need arise between social-educational workers and the courts and police. It merely means a recognition by both sides that the legal process is most helpful when it employs the social process as a help, rather than as a control or an obstruction. The legal process has been the master process, but it is becoming a servant process. The dynamic center of gravity in the control of behavior has shifted to the field of the noncompulsory social-educational process.



Without first-hand experience it is easy to become doctrinaire. I have at least done enough field work to know that we must work with the situations as we find them. But we work to better purpose if the purpose is clarified, and without a logical philosophy our objectives become confused with mere local or political expediency.

It is often claimed that the schools are less socialized than the courts, but if the children's courts could be socialized in twenty-five years by a few determined social workers and judges, the socialization of the educational system when needed should be possible if a few determined social workers and educators would put similar energy into the task. Case work in the bureaus of the educational system that serve individual children will gradually educate the educators.

Evidence that the center of gravity in prevention of delinquency is no longer in the courts may be seen in the activities launched under the Commonwealth Fund, and in the joint committee of the National Education Association and the National Conference of Social Work.

The following examples of the linking of social work with the educational system all occurred in Pacific Coast cities.<sup>1</sup>

#### *What San Diego Has Done*

One report from San Diego, Calif., indicates that a punishment attitude still prevails in the school system. Another report seems to show that the school authorities feel great responsibility for behavior problems and are hoping to enlarge the visiting teacher department and to bring into existence other means of fulfilling the school's obligation in this respect. Individuals and social agencies have begun to bring near-delinquents directly to the attention of the visiting teachers instead of to the police station or the juvenile court, at least in cases where, because of some scholastic element in the problem, the agency or neighbor believes that the visiting teacher can provide the appropriate aid. The court often asks the visiting teachers for supervision and school adjustment of children who have been referred to the court by other agencies. The probation office sometimes transfers delinquent children to the visiting teachers without court trial because it is felt that the case should be handled informally through an educational agency. This is a real gain.

In Berkeley, Calif., too, there are educational agencies that are awake to their responsibility for correction and guidance. This cordial cooper-

ation is given to welfare agencies in carrying out treatment as far as possible on a noncourt basis. There is a department of research and guidance under which several special or case work services are coordinated, including work for occasional behavior problems. There is said to be close cooperation between the educational system and the progressive police department, which as a rule, refers cases to the school authorities or social agencies directly, whenever they can be so handled. The juvenile court of Alameda County sits in Oakland, however, and its officers do not refer cases to the visiting teacher at Berkeley.

#### *Methods Employed in Portland*

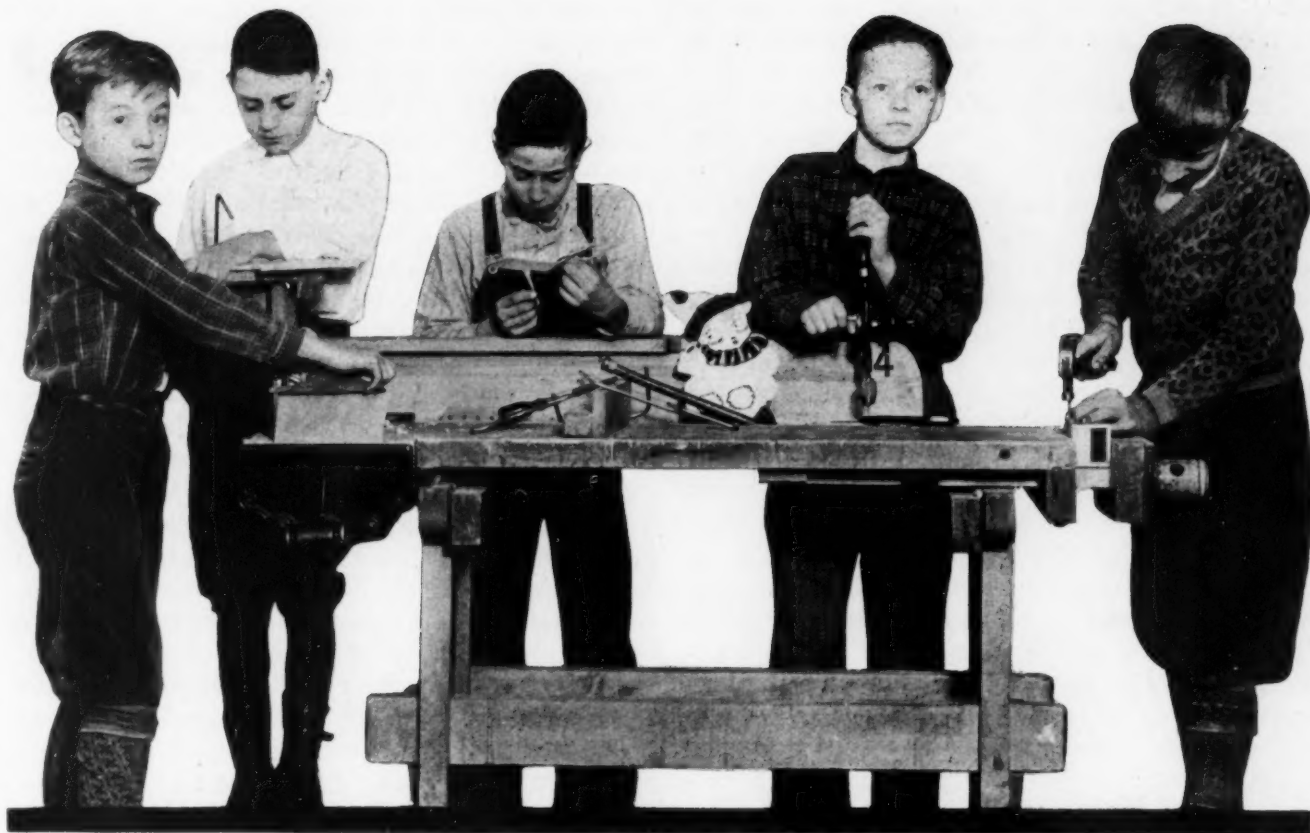
At Portland, Ore., there is also said to be excellent cooperation among the educational and welfare agencies looking toward the prevention of delinquency, and there is a disposition on Judge Clarence H. Gilbert's part to permit the schools to carry out as much treatment as possible without referring cases to court. The court stands ready, of course, to seek and adjudge the facts and to issue its orders in cases that really need legal process, but it has its hands full enough without taking any cases that could be adjusted by noncompulsory social process.

In Seattle, where there are no visiting teachers as yet, the usual range of special services for individual children prevails, but all of the services are reported to be rather undermanned, especially the attendance department, to which behavior problems other than truancy are also apt to be referred by social agencies, including the court, as well as by the schools themselves.

In Spokane, Wash., the schools have social work for near-delinquents in the parental school, the attendance department and the visiting teacher department. Many individuals and agencies seem to have learned to bring behavior cases to the visiting teacher before appealing to the court. The probation office transfers cases that would not have been brought to court for legal process informally to the care of the attendance officer or the visiting teacher. Here again the contrast between the social and the legalistic process is noticeable.

Of course, when there are special classes, vocational counselors, medical and psychologic clinics, clubs and civic project work or socialized attendance officers, much work is being done for children who, if not so treated, would be likely to be involved in behavior difficulties. It is noticeable that even in the absence of visiting teachers one or another of such bureaus or departments often extends its scope to serve such of its charges as have already begun to show behavior difficulties.

<sup>1</sup> Acknowledgment is made to Miss FitzSimon, Miss Kendall, Miss Plekarski, Miss Reynolds, Judge Gilbert and others for providing certain of the data here discussed.



## How Michigan Trains Teachers for Its Handicapped Children

BY BERNICE ELLIOTT, MICHIGAN STATE NORMAL COLLEGE, YPSILANTI

FOR the past four years, pioneer work in teacher training for the handicapped has been carried on in the department of special education at the Michigan State Normal College, Ypsilanti. In 1924 the state board of education made provision for comprehensive teacher training along the different lines necessary to provide for the various types of exceptional children found in the school population.

The problem of the handicapped child in the public schools, long considered a serious one by educators, has only within the last two decades claimed the attention of the general public. Now that the layman is rapidly awakening to the need for differentiated education, and special classes are being organized throughout the state, to supply specially trained teachers has become an immediate necessity.

When we consider that at least 5 per cent of the children of compulsory school age are exceptional, in the sense of requiring special attention in the schools, it is not difficult to see that a large num-

ber of teachers are required to care for them.

Most of the larger cities and many towns have special rooms for the mentally retarded, the crippled and the hard of hearing, as well as rooms for those who need sight conservation. To encourage the increase of such classes, the state offers aid to classes organized with a group of five or more children.

Since the department of special education at the Michigan State Normal College has been in operation, about seventy special class teachers have been graduated. A few have gone into institutional work, but the majority have taken their places as teachers of special classes in this and other states.

The policy of the department has been to encourage the entrance of the "strong" student, the student emotionally fitted to undertake the sometimes exacting demands of special class work. It has been thought advisable to stress quality of student material rather than to attempt to interest larger numbers in the work during the

initial phases of its development. Increase in numbers will come as a natural rather than as a forced growth.

The student entering this field is required to have good health, previous training equivalent to a standard normal school course two years beyond high school, and at least one year of successful teaching experience with normal children. The work in the department requires one year of special training in the field elected.

Formerly this technical training was distributed between twenty-four weeks in residence at the Michigan State Normal College, six weeks spent in residence at the state institution caring for the particular type of children that the student was preparing to teach, and six weeks at selected public school centers where opportunity for contact with well organized special classes in a public school system might be had. Now, however, the tendency is more and more to confine the work to the college where more adequate supervision may be had for practice teaching, greater opportunity given for individual and case study and valuable cooperation acquired between the special education and other departments of the college, such as the departments of physical education, manual arts and home economics.

It is the belief of Prof. Charles M. Elliott, director of special education at Ypsilanti, that one of the most important acquisitions for the special class teacher is the special class point of view.

The teacher must see her problem not in relation to the class as a whole, but in relation to the individual child to whose needs the work is to be adjusted. Also, she must see her task as part of the school as a whole, not in the light of a separate activity. For this reason it is of decided advantage that all students, whether interested in the mentally retarded, the deaf or the crippled, be brought together for general theory courses.

Since the special class teacher in the small community may have to do without social workers who are of such great assistance in this work in the cities, there is need for all students to acquaint themselves with the procedure of social work. They must be equipped to do mental testing, to make case histories and the like. If the student is to become a teacher of crippled children, she must acquire a working knowledge of occupational therapy and corrective technique which will, of course, always be exercised under the guidance of a competent surgeon.

The prescribed work at the Michigan State Normal College provides for the greatest possible amount of time being devoted to observation and practice with children. During the Fall term general theory courses are given; in the winter there is practice teaching, and in the Spring, studies of the individual child, with attention given to specific adjustments.

The special rooms for children who are deaf and hard of hearing, mentally deficient and crippled



*Under the supervision of an especially trained teacher, these handicapped children are fitted for future adjustment to life.*



constitute the practice ground for the working out of theories learned in the academic classes. Because of the greater demand for the other branches of special work the room for the blind and partially sighted was only recently organized.

In all of these rooms, in which a noticeably informal atmosphere prevails, the student is brought into close contact with the children and, working with them and observing them constantly, she comes to be intelligently sympathetic toward their special needs. Sympathy and understanding without sentimentality are stressed. Often students taking regular courses, who have elected to do their practice teaching in the special class rooms become so interested that they shift their work to this department.

In the room for the mentally retarded, no special stress is laid upon handwork, which is so often emphasized in the special class curriculum.

"So many people think," said Gertrude Roser, training teacher, "that special children excel in handwork. They don't. If the normal child received a like amount of training, he could do far more than the subnormal child. The special teacher cannot teach any handwork that will give an earning capacity, and as the two aims in teaching handwork are muscular control and the gaining of a good attitude toward work, socialized recitations and coordination in games will produce the same results."

The child's future adjustment to life is constantly before the special class teacher. In the room for retarded children, the child's sense of failure is lessened in every way possible. He is given work that he can do satisfactorily. He is required to finish all tasks and to give strict obedience in all things. The special abilities

of each child are developed to the utmost. For this a complete and thorough diagnosis is made, which often covers an extended period of time, since many of the children have first to find themselves before showing any special aptitudes. Individual disabilities are at the same time overcome as far as possible. Citizenship is always emphasized. After the child has been given a realization of his worth as an individual, he is taught to know what is expected of him in school, at home and as a member of the community and state. Last, he is supplied as far as possible with the tools



*Deaf and hard of hearing children are taught lip reading by a new method that promotes naturalness and composure.*

that will aid him in getting and holding a job. In academic work, attention is focused upon the practical. From the beginning, the child is taught to read for content. He must be able to read signs, want ads and directions. Simple budgeting is done with a budget approximating \$85 a month. Grocery lists are made up and prices compared. The pupil is given mental tests about once in two years. He is permitted to progress from one grade to another until his mental level is

reached. After this time, books without grade numbers are used so he will not develop a sense of discouragement.

In the room for cripples, called by the children "The Fairplay School," a spirit of good cheer is apparent. Children who have never before had opportunity to attend school are coming here each day in the big "special education" bus and are making progress both mentally and physically.

In the orthopedic class also, under the direction of Gertrude Flint, a regular academic program is followed as far as possible from nine to two o'clock with periods out for lunch, rest and corrective work under a trained physiotherapist. Individual examinations and check-ups are given each term by doctors at the hospital of the University of Michigan. A preliminary clinic is held in the Fall, when the pupils are given a demonstration and explanation of the different types of orthopedic defect and treatment. Individual graphs are kept to show the progress made by the children from month to month. Rest periods depend upon the child and a careful watch is always kept for signs of fatigue. Art and industrial art are taught each day, since handwork is of such great help to muscles.

#### *How Rotary Club Has Helped*

The local Rotary Club has taken a marked interest in the work of the orthopedic room and has made several gifts of practical use to the department. One of these that is in daily use is the triple-plate mirror used in corrective work.

Composure and naturalness are placed first on the list of virtues found in the room for deaf and hard of hearing children. The teacher of lip reading does not call the child's attention to the method of getting sound more than is strictly necessary. The child's hand is held lightly to the teacher's throat, never to his own. It is desired that the deaf child appear as normal as possible. In the words of Whitley Murphy, the training teacher, "The deaf child must be made so lovable that people will want him about."

Miss Murphy has originated her own sound chart based upon the Yale chart used in most schools for the deaf. Her chart, however, differs from the Yale chart in several particulars. In the Yale method, the letter "r" has no sound, and secondary spellings are employed. This causes great difficulty when the child begins to use the dictionary. Miss Murphy has done away with this reteaching of equivalents. She teaches the word naturally. Each child has his own chart showing his progress. He must know each sound from three angles. He must recognize it from the teacher's lips, on his own and he must be able to write it.

Among the additional activities of the department of special education at the normal college are the classes in speech reading and teacher training for the adult deaf, under the direction of Bessie Whitaker. The normal college is one of only a few schools of college rank where speech reading is given as an accredited course. Here, students who have suffered loss of hearing are enabled to continue their education with normal contacts in regular college classes. The Jena method of speech reading, by which skill is acquired through the unconscious imitation of speech, is used at the normal college. This is the first time it has been used in the United States.

While persons of normal hearing may become teachers of speech reading for the adult deaf, students who are themselves deaf are especially encouraged to enter this field, since they are believed to be peculiarly fitted for this work.

For three summers, the department of special education has conducted a nursery school where the students are given an opportunity for observation of this type of work. For three summers also, special courses dealing with the problem child have been given by a visiting teacher associated with the National Committee of Visiting Teachers.

Throughout the entire program of the department of special education, the student teacher is kept constantly in view. The classes have been organized primarily for her benefit so that she may be fitted to do her part in endowing the handicapped child with his rightful heritage.

"Special education, as it is in the public school at present, is to be regarded as a passing phase," states Professor Elliott. "In time the school organization will be broad enough in scope and flexible enough in character to meet the needs of all children, typical or nontypical, without causing any child to be regarded as a special case."

### A Trial College

Should I go on to college or should I continue my education in another direction? This question is one that is disturbing the mind of many a high school graduate at this time.

For the student who wishes to test his academic capabilities, Pennsylvania State College is conducting a trial college, where for six weeks pre-freshmen may try their brains at college subjects. If they fail, they are convinced of their unfitness for college work and make other plans. If they succeed, they will have gained advance college credits. In this way, many students are saved loss both in money and in time, and are prevented from continuing in work for which they have no particular aptitude.

# What Qualifications Best Fit the Superintendent for His Job?

*Not only theoretical and academic training but field experience in the practical side of teaching, supervising and administering are necessary for adequate preparation for the superintendency*

By THOMAS W. GOSLING, PH.D., SUPERINTENDENT OF SCHOOLS, AKRON, OHIO

SCHOOL administration requires many different kinds of officers. Principals and assistant principals, heads of departments, deans, directors of attendance, directors of instruction, administrative supervisors, business managers, purchasing agents, superintendents of buildings and grounds, financial and accounting officers, assistant superintendents and superintendents of schools are all classed as school administrative officers. Here we shall discuss the administrative officer known as the superintendent of schools.

In much of our literature on education the term "professional training" is applied specifically to the training given in schools of education. In this paper the term will include all kinds of training that fits a superintendent for his job, such as the theoretical and academic instruction given in the arts college and in the college of education and the field experience the prospective superintendent may have had in teaching, supervising or administering before he assumes the duties of a superintendency.

## *Functions of the Superintendent Are Varied*

The type of training that will fit a man for any position should be determined by the nature of the functions to be performed when the position is assumed. The most important functions of a superintendent of schools as I see them are the following: (1) to plan a program for public education in a democracy; (2) to select the teaching staff and the supervisory and administrative assistants; (3) to supervise and to develop the staff and the assistants; (4) to select textbooks and the other materials of instruction; (5) to formulate the methods of instruction; (6) to organize and to maintain a complete system of pupil accounting; (7) to maintain a continuous survey for the purpose of determining the needs for school buildings and for the purpose of selecting school sites; (8) to recommend the types of building and equipment best suited to carry out the educational program

of the city; (9) to oversee the operation and the maintenance of the school plant; (10) to prepare the school budget and to present it to the board of education; (11) to oversee the business affairs of the school system; (12) to test the results of instruction and of organization; (13) to establish and to maintain friendly public relationships of all kinds; (14) to give publicity to the purposes, the projects and the achievements of the schools in order to gain good will for the school system; (15) to strengthen and support the morale of the staff and through constructive leadership to inspire the members of the staff to give the highest type of professional service.

## *Liberal Academic Training Necessary*

To perform efficiently functions so numerous and so varied as those requires the broadest kind of preparation. On the assumption that suitable qualifications of a personal nature are present, I place in the forefront of the requirements of training a liberal academic education. The time has passed when men could secure and hold superintendencies merely on the basis of an engaging personality and political influence. The men who are assuming the leadership in public education to-day are expected to command the respect of their colleagues and of citizens in general on account of their high attainments in scholarship.

How far academic preparation shall go cannot be determined by any fixed rule. It is advisable, however, that the superintendent have at least the attainments that would entitle him to the degree of Master of Arts in a recognized academic subject. If a higher degree of mastery is possible it should be secured, because the more a superintendent knows, the better able he is to deal intelligently with the many problems he must meet in his daily experience.

A criticism sometimes directed at superintendents is that they do not have a liberal education. It is said that they have devoted so much time to the mastery of courses in education that they have only a superficial knowledge of the great



fields of learning that have engaged the attention of the intellectual leaders of men. This charge offers a warning that should be heeded.

Scholarship is just as respectable as it ever was. No superintendent can afford to be without it. Consequently, training for the superintendency should include thorough mastery of at least one subject, such as mathematics, natural science, history or English.

The second requirement in the training of superintendents is successful classroom experience. The length of this experience will depend upon the nature of the individual. It should be long enough to give a thorough insight into the problems of the classroom teacher and of classroom procedures.

Few things contribute more to a superintendent's efficiency than his ability to understand the problems and the needs of his staff and to interpret these to the board of education and to the public. A man who has had no classroom experience is not likely to be a good interpreter.

Teachers who know that their superintendent was once a classroom teacher, that he now is a principal teacher and that whatever he says and does is founded upon his experience have confidence in his decisions and accept his leadership as they would not accept the pronouncements of one whose judgments were founded on theory.

Academic preparation and successful classroom experience are not sufficient guarantees of success in a superintendency. There must be in addition wide human interests, understanding of human nature, fondness for people and ability to make adjustments among conflicting personalities. One of the chief functions of a superintendent is to deal with the problems of human relationships. A study of history, of psychology, especially social psychology, and of sociology will help but will not suffice. There must be experience founded on contacts with people of many kinds, there must be maturity of judgment and there must be human sympathy and understanding.

#### *Dealing With Human Relationships*

No professional course of training has been able to supply the qualifications required for dealing with the manifold problems of human relationships. These qualifications are either inherent in the individual or they are acquired by experience. Men who by nature possess these qualifications may be successful superintendents when they are very young; those who are obliged to acquire them by experience should not aspire to the superintendency until the years have brought the necessary adjustments. Human relationships will bring problems to a superintendent every day of

his life. Whatever he may have learned from books about dealing with men or whatever lessons he may have learned from experience in dealing with them will be helpful. The man who wishes to train himself for the superintendency will do well to add to his academic training and to his classroom experience the thorough testing that comes through numerous contacts with all sorts of people.

#### *Business Training Is Essential*

A modern school system has business as well as educational problems to solve. In some cities a sharp differentiation has been made between business and education. In my judgment this is unwise because in a school system the business that is transacted always has educational implications. School business is not for profit. It is always for some educational purpose. School books and school supplies involve business transactions that are for the good of the children of the schools. The purchase of school sites and the construction and the equipment of school buildings involve business transactions that are for the welfare of the children of the city. Every business transaction in the schools is tied up in some way with an educational objective. Consequently, the superintendent of schools who is to command the respect of his board of education and of the public and who is to guard the interests of the children in every aspect of school administration should have training in business.

It is not necessary that this training be of the detailed kind required of the person who has nothing but business to engage his attention. The training should be sufficient, however, to afford an insight into business methods and procedures. Some of this training may be acquired through a study of economics and of bookkeeping and accounting. Some of it properly may come through actual business experience acquired prior to the assumption of the duties of the superintendent's office, and some of it may come through the special courses provided in colleges of education.

The leading colleges of education have developed numerous courses for the training of superintendents of schools. Much of value may be derived from almost every one of these courses. They are so numerous that it would be difficult for any one person to take all of them. Although data for the evaluation of these courses are not available at the present time, there is good reason for emphasizing the importance of certain ones of the group.

In the first place every superintendent of schools while in training should have a thorough grounding in the history of education in order

that he may know what has been done in the past, what has been tried, what has failed and what has succeeded; in order that he may have a clear conception of the continuous and progressive effort of the race to raise itself to higher levels by means of education, and in order that he may appreciate the close relationship between educational endeavor and social, economic and political advancement.

Courses in the philosophy of education ought to receive considerable attention. To know the aims of education, to relate education to the other endeavors of the race, to know why we are struggling, and for what we are struggling—all these seem to me to be of the utmost importance. One marked criticism of men recently trained in schools of education is that they know a good deal about the husks of the subject and little about the kernel.

#### *Applying the Philosophy of Education*

Even if these charges do not apply to any considerable number of men, it is fair to state them because they point out a real danger. A man who has a comprehensive understanding of the philosophy of education will have practical views of the place and the importance of part-time education, vocational education, adult education, continuation schools, of child labor laws and regulations, and of the relationship between cultural and practical education.

We shall not attempt to appraise all of the courses offered in the colleges of education for the training of superintendents. Let it suffice to say that in addition to the subjects already mentioned, the courses in tests and measurements, statistics, the administrative management of pupils, mental hygiene, finance and accounting, business management, school surveys, educational psychology and in the psychology of learning will be helpful.

It is the particular function of the superintendent to organize the schools so as to provide for the needs of all kinds of students in all kinds of ways. Superintendents should have a sense of relative values. They should know relationships. They should be able to appraise methods and to evaluate content and purposes. If they are not able to do these things, they are likely to be lost in a wilderness of facts valuable enough in themselves but losing much of their significance unless they are organized and directed to purposeful ends. The courses offered by the colleges for teachers are valuable in proportion to the help they give the superintendent in organizing and interpreting the facts with which he must deal.

It is apparent from what has already been said

that it is not desirable for young men without adequate academic training and classroom experience to pass from schools of education directly into the superintendency. The normal procedure is from the academic college to the professional school, to a teaching position, to a principalship, to a superintendency in a small town. Then further professional training in a school of education will be desirable, with a superintendency in a larger town at the end of the training.

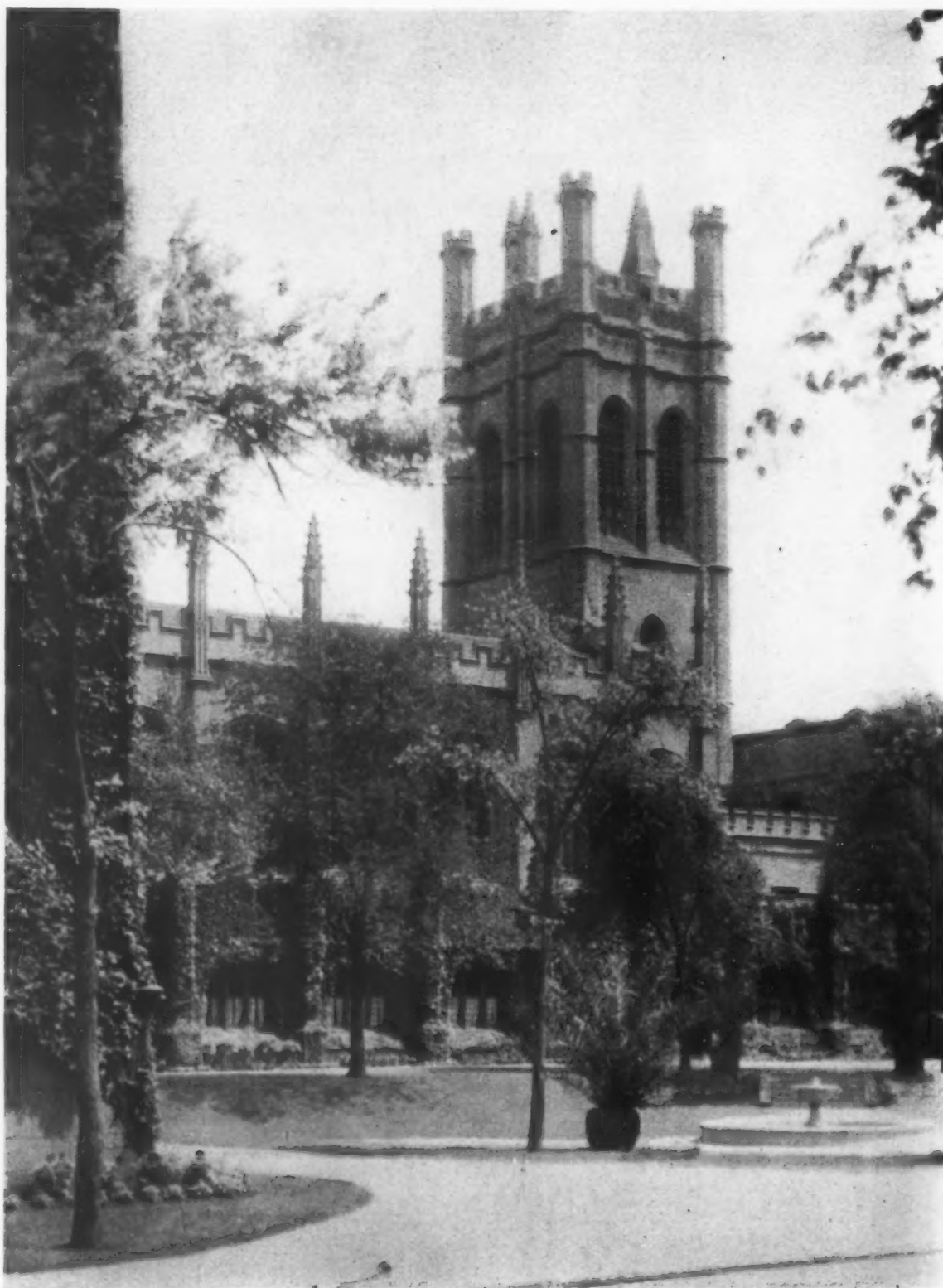
The principles of administration are similar in both small and large cities. In a small city the superintendent ordinarily performs most of the administrative functions with little if any help. In a larger city he is obliged to delegate a considerable number of his duties to others. The kinds of responsibility are not greatly different. The burden is greater, not so much from differences in quality as from differences in the quantity of the work to be performed.

Somewhere along the way from student to teacher, to principal, to superintendent, the administrative officer known as the superintendent of schools must be thoroughly indoctrinated with the theory of democracy. He must believe in the public schools, he must believe in the obligations of society to care for its children, for all of its children, whether they are rich or poor, young or old, normal or subnormal, physically strong or physically weak, leaders or followers. "All of the children of all of the people" will be the objects of his care. Without this fundamental conception of democratic education and without full unequivocal acceptance of the obligations incident to this theory, no man is competent to be a superintendent of schools in an American city.

#### *Superintendent's First Duty Is to the Pupils*

By the same token no man is competent to be a superintendent of schools unless he owes his first allegiance to the children of the city. He must accept the theory and act upon it that the schools are not established and maintained for the parents, or for the teachers, or for the politicians, or for any private interest whatsoever. They are established solely for the children and for the society of which these children form so vital a part.

Training for the superintendency, then, is the product of no single course of instruction. It is not the product of the liberal arts college alone. It is not the product of the college of teachers alone. It is not the product of classroom teaching, of the principalship, or of experience. It is the product of all of these, supplemented by integrity of character and by single-minded devotion to the public welfare through the agency of the public school.



Courtesy University of Chicago

*In Hutchinson Court* on the University of Chicago campus many interesting and traditional ceremonies have taken place around the fountain. The chimes in the Mitchell Tower daily play the Alma Mater.



# How Shall Our Schools Be Governed?

*A study made of 318 schools of the Northwest with respect to the form of government under which they operate showed that in 168, pupils are being given the opportunity to govern themselves*

BY R. D. RUSSELL, PROFESSOR OF SECONDARY EDUCATION, SCHOOL OF EDUCATION, UNIVERSITY OF IDAHO

**M**ATTHEW ARNOLD said a number of years ago that a liberal education consisted in knowing "the best that has been done and said."

This conception of education has been predominant for many years and has tended to overshadow the important fact that education aims more at the practice of perfection than at a knowledge of perfection. A knowledge of the best does not necessarily guarantee practice commensurate with this knowledge. Behavior patterns of conduct are more dependent upon actual participation in the activities in which perfection is desired than in a long range study about such activities. Good conduct is more a matter of habit than of knowledge.

A school system that does not give pupils opportunity to develop desirable traits and attitudes is probably failing to a large extent. If the ability to participate successfully in government according to democratic principles is desirable, then practice in government must be given.

If originality is a desirable trait, practice in this trait is necessary. If honesty is a desirable trait, practice in honesty is necessary. The school, therefore, is essentially a place for developing by practice desirable habits, attitudes and appreciations. Participation in government by the pupils should offer an opportunity for wholesome practice in activities that will be needed in later life.

## *Questionnaire Is Sent Out*

The present investigation attempts to determine the status of the schools of the Northwest with respect to the form of government under which they operate. Three hundred and eighteen schools, ranging in attendance from 17 to 2,440 are included in this investigation. A copy of the questionnaire used in making this study is reproduced here.

The first question, relative to the method of government, was answered by 309 schools. According to the answers, in 168 schools, government was by student officers advised and supervised by

faculty members; in 138, by the faculty and in 2 by student officers.

It seems hopeful that most of the schools are giving pupils an opportunity to participate in their own government.

Pupils ordinarily participate in government through a representative council. One hundred and seventy-three schools out of the 318 answering this question reported a student council, while 145 did not have one.

Principals were asked to give the exact name of the council or similar organization, and the va-

*Table I—Names Given Students' Council by Various Schools*

1. Student Council .....	78
2. Student Body Council .....	12
3. Executive Council .....	12
4. Associated Students' Council .....	10
5. Board of Control .....	9
6. Executive Committee .....	8
7. Executive Board .....	3
8. Student Govt. Committee .....	2
9. Boys' and Girls' Council .....	2
10. High School Council .....	2
11. Student Senate .....	1
12. Boys' and Girls' Advisory .....	1
13. Principal's Cabinet .....	1
14. Student Court .....	1
15. Booster Club .....	1
16. General Council .....	1
17. Vigilance Committee .....	1
18. Board of Directors .....	1
19. Student Governing Board .....	1
20. Members of the Red "R" .....	1

Number Replying .....148

riety as well as the frequency can be noted in Table I.

This table shows that "student council" is used a greater number of times than any other name, and that by far the greatest number of designations included the word "council." A standardized terminology seems to be in process of development.

The median number of pupils belonging to the

council was approximately 9, with the standard deviation of 4, the number ranging from 3 to 25. It is evident, therefore, that there is little agreement among the 151 schools replying to the question relative to the most desirable number of members. Approximately two-thirds, or 100 schools, had councils ranging in membership from 5 to 13 inclusive. It is probable that a membership of more than 13 would be undesirable.

The question relating to how often the council meets was answered by 150 schools as follows:

Irregularly .....	45
Weekly .....	39
Monthly .....	29
Biweekly .....	23
Bimonthly .....	12
Every six weeks .....	1
Special meetings only three per year....	1

—  
150

These data are self-explanatory. Approximate-

ly two-thirds of the councils have a definite time of meeting, and these are no doubt in the schools that have delegated the greatest amount of authority and responsibility to their councils.

The hour set for the meeting is irregular. Out of 112 schools replying, 30 reported their meetings in the morning; 26 between 12 and 2:30 p.m.; 35 between 3 and 4 p.m.; 10 after school, and 11 were variable. From 3 to 4 p.m. seems to be the most popular time of meeting, although 30 hold meetings at some period during the forenoon. The majority of schools reporting indicate that meetings are held during school hours.

The length of council meetings averages 37 minutes and ranges from 25 to 60 minutes. Only 18 schools, however, answered this question, and it cannot, therefore, be considered a reliable estimate.

Principals were asked to name the committees that work with or under the direction of the council. These are listed in Table II shown on page 43.

#### Questionnaire Sent to 318 Schools

Please check or give the answer that conforms to your system.

##### I. Method of government

1. By the faculty
2. By student officers
3. By student officers advised and controlled by faculty members

##### II. If you have student participation in government, please answer the following:

1. Name of council or similar organization
2. Number on council
3. Who are the members? Class presidents, a faculty sponsor, representatives from home rooms, etc.?
4. How often does it meet?
5. If it meets in school hours, at what time of day?
6. What committees work in cooperation with or under the direction of the council?
  - A. Who are the members?
  - B. How are the committees chosen?
  - C. Does a faculty member sponsor it?
7. What are the qualifications for membership in the council?
  - A. Scholastic
  - B. Social
  - C. Approval of principal
  - D. Other qualifications

##### 8. Please check or list the activities handled last year

###### A. Disciplinary

- (1) Outlining regulations for conduct
- (2) Enforcing those regulations by
  - a. Apprehending and punishing offenders
  - b. Turning offenders over to faculty for punishment

###### B. Control of athletics

- (1) None
- (2) Partial
- (3) Complete

###### C. Control of and provision for assemblies—to what extent?

###### D. In what ways does it control school finances?

###### E. Other functions

##### III. What are the difficulties, disadvantages or dangers of student body government?

##### IV. What changes do you contemplate in another year?

##### V. What do you consider to be the value of student body participation in government?

##### VI. Please send with this information a copy of your student body constitution or any written regulations available

Table II—Committees That Work With the Councils

Various Committees .....	20	Attendance .....	1
Athletic Committees .....	13	Library .....	1
Social .....	13	Grounds .....	1
Only Special Committees .....	11	Street Car .....	1
Assembly .....	6	Audits .....	1
No Committees .....	6	Traffic, Motor and Fire Squads .....	1
Financial .....	4	Ushers .....	1
Special Appointed .....	4	School Spirit .....	1
Entertainment .....	3	Self Govt. Committee .....	1
Lunch Room .....	2	Class Committee .....	1
Student Control .....	2	Home-Coming Committee .....	1
Advertising .....	2	Annual Staff .....	1
Activities .....	2	Locker .....	1
Traffic .....	2	Boys' Federation .....	1
Clean Up .....	2	Council of Girls .....	1
Scholarship .....	2	No Council: S. B. Officers .....	1
Members at Large .....	2	Standing Committees .....	1
Study Hall Monitors .....	2	Information .....	1
Debates .....	2	Police .....	1
Rules and Regulations .....	2	Student Council runs everything .....	1
Literary .....	2	Visitation .....	1
Lost and Found .....	1	Court of Justice .....	1
Pep and Cheer .....	1	Etiquette .....	1
Plays and Theatricals .....	1	Budget .....	1
Hall Committee .....	1	Nominating Committees .....	1
Study Hall .....	1	Memorial, etc. ....	1
Classroom Committee .....	1	As appointed by S. B. president .....	1
One General Committee .....	1		
Vigilance .....	1		
Banking .....	1		
		Number replying .....	140

The question relative to the committees that work in connection with or under the direction of the student council is not answered satisfactorily, as the frequencies will indicate. However, some idea of the number of different committees may be gained even though there is no doubt a considerable number of opinions in this respect. For example, the names of the committees included by the 20 principals who answered by saying "various committees" are not included here. The answers indicate that athletic and social committees are more apt to exist than others. If Table II is to be considered reliable, it is probable that the council, through various committees, does not have control over extra-curricular activities to a desirable extent.

Table III gives some idea regarding the method of selecting members of committees.

From Table III it can be observed that the student body president, the council or the student body usually selects members for the various committees. This selection, it seems, has been taken largely out of the hands of the faculty members. In only one case the principal selects the committees, and in only two cases is it indicated that the appointments are made with the principal's approval. If the method of selecting committees has any significance, we may conclude

that the pupils usually have this responsibility. If the committee is appointed, however, its work is sponsored by a faculty member in 83 out of 87 cases.

The qualifications for membership in the council varied considerably. The number of times each qualification was mentioned is checked in Table IV. The approval of the principal and a good scholastic record are important qualifications for membership on committees. Social qualifications also are mentioned in many cases.

In 90 schools the council seems to function in relation to school discipline by

Outlining regulations for conduct .....	82
Enforcing these regulations by	
(a) Apprehending and punishing offenders .....	16
(b) Turning offenders over to faculty for punishment .....	31
Combination of (a) and (b) .....	34

Number replying .....

90  
The fact that only 90 schools answered this question indicates that on the whole disciplinary matters are taken care of by the faculty. Eighty-two schools out of the 90 reported that the council participated in outlining regulations for conduct. In 8 cases, however, the council



participated in influencing the regulations without having anything to do with making them. Pupils are usually slow in reporting acts of misconduct to school authorities, and it seems encouraging that so many schools are reporting pupil participation not only in turning offenders

*Table III—The Methods of Selection of Committee Members*

Appointed by the president of the S. B...	24
By the council .....	18
Elected by student body .....	10
Appointed by chairman of council.....	9
Appointed .....	7
By faculty advisers recommending to council .....	3
Elected by classes .....	3
By student body and faculty representatives .....	3
Important ones elected, others appointed.	2
Appointed by president subject to principal's approval .....	2
By class presidents .....	1
By scholastic and citizenship standing...	1
Financial Club by Booster Club, others by president .....	1
By chairman of council and two from S. B. ....	1
Different ways according to function....	1
By principal .....	1
<b>Total .....</b>	<b>87</b>

over to the faculty for punishment but in the administration of the punishment.

The council seems to have more control over athletics than over disciplinary affairs, a condition that can normally be expected. Out of 174 replies, only 20 stated that this function was reserved exclusively for the faculty. On the other hand, 28 schools reported that the council had complete control of athletics and 126, partial control.

The provision made for holding assemblies, however, was not the same as for athletics. Only 112 answered this question which probably indicates that fewer schools allow pupils to participate in making provisions for assemblies. Of the 112 replying, 17 reported that the council had no control over assemblies; 68 that it had partial control, and 27, complete control. The assembly is traditionally a place where faculty members assume leadership, as it is an offspring, in part at least, of the chapel exercise formerly held in colleges and academies. Consequently, we could not expect as much pupil participation in this matter as in either athletics or the control of school finances.

The extent to which the council had charge of school finances was indicated in 144 cases; com-

plete control was indicated by 44 schools; partial control by 73; and no control by 23 schools.

In answer to the question regarding the changes contemplated for another year the following replies were received:

Enlarging responsibilities of the pupils .....	14
Minor revisions .....	9
New organizations .....	4
Enlarging responsibilities of the faculty .....	3
Not settled .....	1
Abolish student government .....	1
Abolish demerit system .....	1
Miscellaneous .....	14
No further changes .....	49

Number replying .....

It will be observed from the foregoing list that in over half the schools, principals are not planning any changes. If changes are planned, however, they are more apt to be in the direction of enlarging the responsibilities of the pupils. Only one expected to abolish student government, and four were planning new organizations. The fact that the tendency is to give pupils more instead of less responsibility indicates that pupil participation in government is proving successful. Pupils seem to be proving themselves equal to the occasion.

Difficulties, disadvantages or dangers in student body government were reported by 127 schools. The replies showed the following reasons for the lack of success:

Lack of proper faculty supervision .....	31
Lack of pupil judgment .....	22
Desire on pupils' part to have more authority than they should have .....	7
None .....	7
Not good in small schools .....	4
Failed to secure good officers .....	4
Sufficient interest lacking .....	2
Miscellaneous .....	50

Number replying .....

Miscellaneous disadvantages were those that could not conveniently be classified, and they number less than half of those mentioned. The difficulty of securing proper faculty supervision was mentioned in 31 cases. This cannot, however, be considered a weakness or a danger in student body government but rather a weakness on the part of faculties. It is the obligation of administrators to remove this deficiency. Lack of pupil judgment was mentioned in 22 cases.

It cannot be expected that pupils will be mature in judgment or will have many of the traits possessed by administrators and teachers. If this were true, we should not need to have pupils participate in government, but the fact that they are deficient in this respect emphasizes strongly the need for practice in this ability with a view

to its perfection. No one would claim that the school is as efficient a machine with student government as it is with faculty government. As far as efficiency is concerned, from many viewpoints a democracy is not as efficient as a monarchy. But in education, it is a question of whether pupils are to live under one type of government or another. If the school represents a monarchy the pupils should have practice in being ruled. If it represents a democracy, then they should have practice in self-government. As our schools represent a democratic form of government, they are obligated to train pupils in the traits needed in this type of government.

Following are a few selected answers regarding the disadvantages of student body government:

"In a small school pupil control of discipline is undesirable because of close acquaintance of the pupils and because of difficulty in finding leaders each year."

"Pupils are too hard on offenders."

"Teachers expect too much from it. It complicates the problem of discipline."

"Pupils lack initiative and control. A large majority want to have school run right but they are a little timid in apprehending and punishing the few who resent any and all government."

"We have no discipline problem. Pupils feel that the faculty-student control is fair, just and democratic."

"There is poor selection of officers by the student body."

"Delegation of too much responsibility early in the experiment is disastrous."

The foregoing statements of the administrators

rather than the removal of such an opportunity. Administrators, however, recognized the importance of this form of school activity, as is evidenced by the statements relating to the values they feel are being realized by such participation. These reports are summarized in Table V.

*Table V—Advantages of Student Government as Listed by Principals*

Citizenship .....	52
Responsibility .....	37
Cooperation .....	30
Leadership .....	22
School spirit .....	20
Better discipline .....	11
Character training .....	5
Initiative .....	5
Self control .....	5
Real living begins with participation ...	4
Develops understanding .....	4
Self assertion .....	3
Very valuable .....	3
Trains pupils to talk before an audience	3
Not very much .....	2
Morality .....	2
Relieves school officials of much routine work .....	2
Doubtful .....	1
None whatever .....	1
Discovery of leaders .....	1
Avoids many serious troubles .....	1
Social satisfaction of various types of pupils .....	1
Valuable training for a few .....	1
An activity to keep the principal one jump ahead of the student body council and train him to be a good lawyer ...	1
Number replying .....	140

*Table IV—Qualifications for Council Membership*

Scholastic-approval of principal .....	29
Scholastic .....	20
Approval of principal .....	18
Scholastic-approval of principal-social .	12
Scholastic-approval of principal-others .	9
Scholastic-social .....	6
Scholastic-others .....	5
Approval of principal-others .....	5
No qualifications for membership .....	3
Scholastic-social-others .....	3
Social .....	2
Others .....	2
Number replying .....	34

give some idea of the various objections to pupil participation in government. Many of them represent deficiencies on the part of the pupils, which emphasize the need for practice in government

This table shows that only four questioned whether they are realizing values from allowing pupils to participate in government. One of these said "none whatever," one said "doubtful," and two replied by saying, "not very much." The fact that this limited number considered pupil participation in government valueless indicates the strong faith administrators have in this form of extra-curricular activity. More than a third of those reporting felt strongly that pupils were securing training for citizenship. Approximately a fourth felt responsibility to be an outcome. Training in cooperation, leadership, school spirit and better discipline are other outcomes they think they are realizing. The judgment of these men is, of course, not based on the result of scientific measurement but is probably fairly reliable. The selected answers given below in the words of the principals and superintendents will indicate more clearly than the summary, the attitude of administrators.

"Develops initiative and leadership. Trains pupils to talk before an audience."

"Gives pupils responsibility and interest in school government."

"Develops character and civic pride."

"Pupils become interested in regulations; they see the need for them and help uphold them in many ways."

"Cooperation with faculty fosters better spirit. Pupils see faculty viewpoints and vice versa."

"Prepares pupils for citizenship and acceptance of responsibility; assists materially in order in and about the buildings."

"Greater patriotism and pride for good government on the part of the pupils."

"Places pupils upon their own resources directed by the faculty."

As evidence of the interest in student government, many additional statements were made in answer to the questions. Following is a list of miscellaneous statements that are interesting.

#### *The Attitude of Some Administrators*

"We had student government last year. However, the pupils voted overwhelmingly in favor of returning to faculty control."

"We have had a form of student government for three years. It has been abandoned by the pupils primarily because of the lack of harmony among themselves. The pupils' organization now is primarily a social organization, activity being limited to the giving of dances and parties and arranging programs."

"The pupils should be made to realize at the outset that the superintendent and faculty are employed to run the school and to be responsible for results. When they realize this they see at once that whatever authority they, the pupils, have must be delegated by the superintendent and the faculty."

"We do not have student self-government. As I have never tried I do not feel competent to pass judgment on it. Nevertheless, I am venturing an opinion. I do not believe it can be successful, except in a school where the pupils who are taking the leadership have a rather mature viewpoint. This type of pupil is not often found in the smaller high schools. Some of the schools having student self-government have it in name only as it is controlled by numerous faculty restrictions and manipulated quietly by a clever principal."

The results of this study may be summarized as follows:

1. The majority of schools included in this investigation had studied participation of pupils in government through a representative council.

2. The council has a great variety of names. By far the greatest number of designations, however, include the word "council."

3. The council has an average of 9 members, with a standard deviation of 4, the number ranging from 3 to 25. It has a different period for meeting in more than half the cases, the weekly meeting being the most popular and the monthly meeting next. The meetings are usually held during school hours, the most popular time being between three and four o'clock. The length of the meetings averages thirty-seven minutes, and ranges from twenty-five to sixty minutes.

#### *How Student Committees Function*

4. Various committees work under the direction of the council. These committees, as can be expected, mostly represent extra-curricular activities. They are usually selected by the student body president, the council or by means of a vote of the entire student body. The principal does not seem to interfere greatly with the free appointment of members for the committees.

5. Qualification for membership in the council varies considerably. Scholastic attainment combined with the approval of the principal is mentioned most frequently, with scholastic attainment alone coming second and the approval of the principal alone third.

6. Only 90 out of the 318 returning the questionnaire answered the question relative to the council's participation in school discipline. This indicates that school discipline is largely taken care of by the faculty. Out of the 90 cases, however, 82 reported that the council participated in outlining regulations for conduct and in 81 cases, they participated in their enforcement.

7. The council seems to exercise a little more control over athletics and student body finances than over provision for assemblies.

8. Most of the schools reporting are planning no changes for the coming year. If changes are planned, however, they are in the direction of giving the pupils more responsibility.

9. To get "proper faculty supervision" is the most frequently mentioned difficulty connected with pupil participation in government, with "lack of pupil judgment" coming second. The former is a faculty weakness primarily, and the latter emphasizes the need for training in judgment by actual participation.

10. Administrators feel that they are gaining much from participation in this form of activity. Only four questioned its value. The others frequently mentioned that desirable habits of citizenship, responsibility, cooperation and leadership were being developed.



# Hand Picking College Students

*Pupils of Monrovia High School, Monrovia, Calif., are recommended to college only when their teachers, by a series of tests, are assured that they will succeed*

BY A. R. CLIFTON, DISTRICT SUPERINTENDENT, MONROVIA CITY SCHOOLS, MONROVIA, CALIF.

WHO should go to college? What sort of hurdles should be placed along the intellectual or educational cinder path? Should each college determine its own individual entrance requirements or should associations of colleges and universities agree on basic requirements that will permit candidates to enter any of the associated institutions? What part should mental and achievement tests play in determining the status of college aspirants? Should much or little weight be given to the judgment of high school principals? How much faith may be placed in the classroom records of teachers?

For several years we have studied the high school graduates of Monrovia, Calif.—150 to 160 of them, keeping in touch with many through college and beyond. The result of these studies was the conclusion that we had not been rendering the service to our pupils it was our duty to render, and that possibly our plan of recommending them to continue their education in college or *vice versa* was one of the weaknesses of our system. Up to this time satisfactory high school grades and reasonable personal reliability were the determining factors in college recommendation. A study of the success of some students and the lack of success of others offered ample evidence that factors were involved other than those we had taken into consideration, that mental equipment, social attitudes, strength of character, interests, health and work habits were perhaps of more importance than the qualities we had based our judgment on, and that, with a proper analysis of each individual, we should be able to determine with a reasonable degree of assurance, the particular institution that would serve the pupils best.

## *Helping Pupils to Choose Right College*

There are many colleges and universities, large and small, within a short distance of Monrovia. While admission requirements for general courses are much alike and standards of scholarship similar, there are variations in methods and policies, educational procedures, institutional or-

ganizations and objectives and professional and social contacts that make it not only possible but exceedingly probable that some students will achieve success in some institutions and not in others. With this in mind we are now attempting to hand pick our college students and to recommend them to the school that can do the most for them in the light of the personal traits and abilities we have found them to possess.

## *How the Plan Works*

All pupils, before being assigned work in our high school, are given such mental tests, group or individual or both, as seem necessary. These, when coupled with the vocational information gathered in the grades, provide the program committee with the data necessary to advise the young people more intelligently about courses to pursue. They also help in the proper grouping of pupils in class sections according to their ability. The subject matter of the various sections is adjusted to the needs and abilities of the individuals composing the group. This policy is maintained through the high school course as far as possible, of course with the administrative limitations that sometimes prevent carrying out the full program. During the high school period an effort is made to gather and record the vocational interests and aptitudes and mental and social traits. Citizenship, health and scholarship curves are recorded on cards together with the vocational information acquired.

Early in the school year charts headed "College or Vocational Information" are sent from the office to the senior classroom. On these charts are the names of the pupils and below each name is ample space for the pupil to write the name of the college or university he desires to enter and the course he wishes to pursue, or, if he has no college aspirations, the line of work he plans to enter as soon as he can prepare for it. These charts are returned to the office and the statements by the pupils are studied in the light of the data already gathered and enumerated.

Following this procedure the department of research and guidance has a conference with each pupil, all facts known about him being available to the research director. A report form is previously prepared upon which an analytical statement is recorded, together with a recommended policy to pursue in dealing with the pupil.

The final disposition of all cases is, of course, in the hands of the high school principal. Again there is a personal conference with the pupil, there being before the principal when the conference takes place the scholarship and citizenship records, the health data, vocational information, the intelligent quotient and research department recommendations.

What has this to do with "hand picking" college students? The program as outlined is in no way a sifting out process. There is in it no element of discouragement. It provides both educational and vocational guidance, and the pupils have come to regard it as an important part of their high school careers. An effort is made, of course, to lead those without college abilities or interests—there are always a great many in every public school—into fields where other than academic success may await them. When this is accomplished the major interest turns to guiding other pupils into higher institutions where they can personally profit most and give the best educational accounting of themselves.

There are several advantages in our present system over our former plan. There has been eliminated the discouragement that too frequently comes to students from failure in college through entrance into institutions for which they are unsuited or in attempting work for which they are not adapted. Time, money and energy have been saved by a wise guidance of our high school pupils.

### "Just What Is an Education?" This High School Boy Wants to Know

"Just what is an education?"

A Virginia high school boy makes this question the thesis of a remarkable letter to his principal, all the more remarkable because the boy was rated as a "poor" student. He is a member of the senior class and has an intelligence quotient of 111. His conduct record is "good."

The letter, published in the *Virginia Journal of Education*, is reprinted here:

"Dear Sir:

"Unfortunately I seem to be unable to express myself in speech as I would like to. Call it inferiority complex, self-consciousness or whatever

you wish, the fact remains that my mind goes blank, forgets its mission, when I enter your office. Words fail me and my tongue seems tied. For this reason I am writing instead of trying to discuss things verbally.

"Since Christmas vacation I've done a pile of thinking. I have come to the realization that I have approximately fifty more years to live; that during those fifty years or so I shall have to make my own way. That way in which I live, what I do, and the impression I leave on the world will be due largely to the ideas, theories and ambitions I form during the next four years.

"Throughout my years in high school I have been a poor student because I do not enjoy the work. I have failed to see the importance of stumbling through a maze of other things which, to my mind, nets the student nothing. Science and literature are the only subjects that ever interested me but, unfortunately, they have a very small fraction of my time.

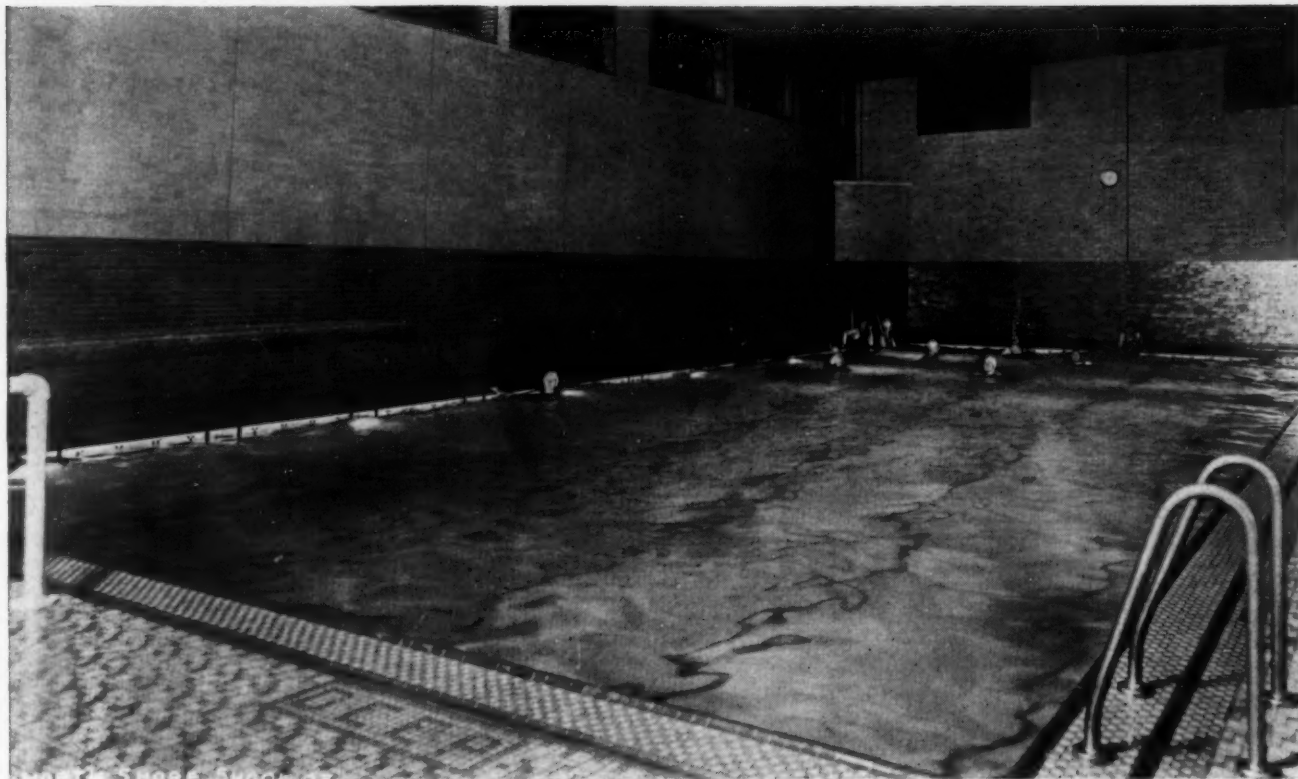
#### *Books That Appeal to This Pupil*

"I enjoy philosophy and psychology and good books. I have often stayed up all night trying to understand Nietzsche, Freud and others. In the past two months I have read 'Common Sense in Education' by Bell, the 'New Decalogue of Science' by Wiggam, 'The Story of Philosophy' by Durant, and several other books of this type. I enjoy and profit by reading this sort of book, but when I take up a geometry or a grammar, my interest stops and my mind wanders to other things.

"Perhaps I have the wrong conception of what an education means, but I don't think I am entirely to blame for that. No one has ever been able to give me a true definition of education. I have been told by many to study hard, make good grades, but that is as far as it goes. When I say why, the answer is always the same, 'In order that you may become an educated man.'

"What I want to know is, just what is an education? Is it a knowledge of algebra, geometry, grammar rules and historical events, or is it something else, something beyond? I believe it is the latter.

"There are many other questions I would like to ask, but you will have trouble enough reading what I have already written. Perhaps I have said too much, overreached the line. I am not sorry for it because, for once, I have been frank concerning my thoughts on education. To be perfectly frank, I think education has left me more mystified than ever. If someone who knows would only help me get the right slant on things, you for instance, I think I could come out far ahead of where I am now."



## A Modern Substitute for the Old Swimming Hole

*The schoolboy of to-day learns to swim and dive in an expertly designed and constructed pool, which is becoming an indispensable part of the equipment of schools everywhere*

BY H. D. MACKEY, CHICAGO

PRACTICALLY every high school building that is now being erected is including in its equipment an expertly designed, constructed and equipped swimming pool. Many new buildings for children of the preliminary grades are being equipped with pools. There are definite reasons for these installations.

With the passing of the old swimming hole, children of school age have found it increasingly difficult to obtain swimming places. Children of the United States, where the champions of every branch of the swimming art originate, are naturally water minded. They live, in most cases, in or near densely populated communities where the swimming facilities are difficult or expensive to obtain. If their home city borders on a large body of water, as in the cases of New York, Chicago, Los Angeles and other large cities, the public beaches are overcrowded and are none too sanitary. Reaching them probably entails too long a trip for the younger children. It is interesting to

note that these cities, although adjoining large bodies of water, are foremost in installing swimming pools in their schools, and the smaller communities are rapidly following their lead.

The swimming pool provides growing children with an opportunity to learn, easily and correctly, the art of swimming. Rigidly supervised, this training becomes a substantial asset throughout their lives.

Most of the schools equipped with swimming pools include a thorough life saving course in their curricula. The child is taught how to take care of himself and, when necessary, of others, in the water. Those who inherently fear water lose this terror during the weeks of careful instruction.

Thus the child is taught the rudiments and often the specialties of swimming and life saving, and is afforded a clean, safe means of fulfilling his natural inclination for swimming. Our foremost physical instructors are enthusiastic in their praise of swimming as a health builder. It devel-



ops the body and quickens the perception. Educational authorities, realizing these facts, are anxious to include swimming pools in their building programs.

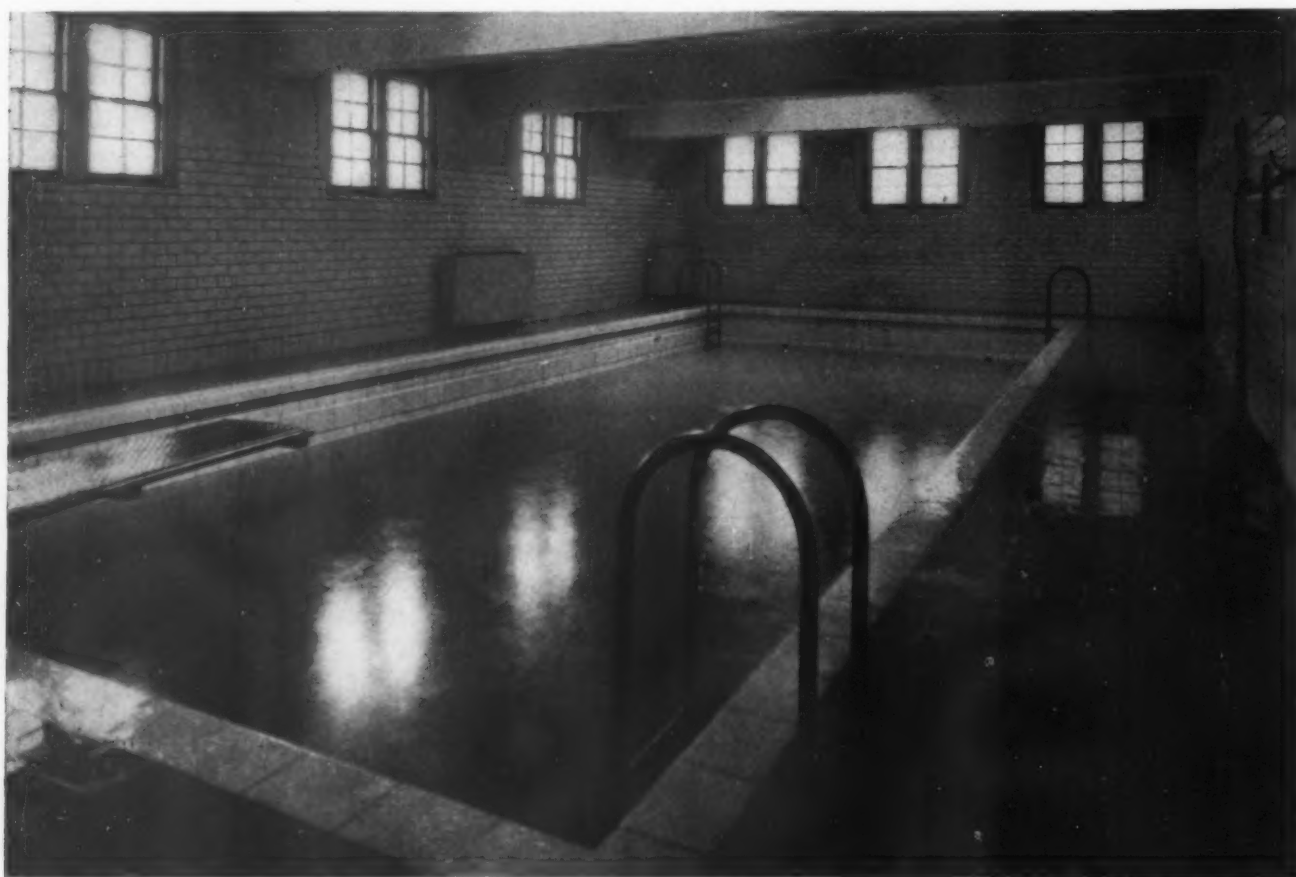
For the benefit of educational directors who are interested in this phase of school building construction, a few high lights of swimming pool design and equipment are mentioned here. The ordinary pool is not less than 60 feet long by 20 feet wide, and varies from  $3\frac{1}{2}$  to  $9\frac{1}{2}$  feet in depth of water. These figures depend upon the requirements of the pool to some extent, but they are recognized as standard by the leading swimming associations of the country. The pools ordinarily are of concrete construction, surfaced with white tile. Color may be employed in distance markings and racing lanes. The latter are merely lines of colored tile, running the length of the pool, from about four feet from each end. They are placed no less than five feet apart. In racing contests the swimmers use these lines as direction guides, swimming over rather than between them. The distance markings are numerals placed at regular intervals, usually five feet, noting the distance from the deep end of the pool.

Ladders, diving boards, hanging rings and other external equipment are subject to the particular

requirements of each pool. The drain gutters surround the pool about two inches above the normal water level, and are so designed that they afford hand holds for the swimmers and serve also as overflow drains. The deck, or flat surface around the pool, is usually of nonslip tile, affording a sure footing for swimmers. Showers and lockers are placed, whenever possible, adjacent to the pool room.

#### *Mechanical Equipment Is Important*

The mechanical equipment is no less important than the design of the pool and the pool room. The modern swimming pool is equipped with an efficient filtration system, which filters the water before it enters the pool. A recirculation system composed of drains and inlets, a water heater and a pump, constantly changes the water of the pool. These may be capable of turning over the entire water of the pool, filtering and returning it, in from four to twenty-four hours, as required. It is necessary that the water be chemically sterile. The sterilizing agents in common use to-day are chlorine and ozone, the former being the more popular. With the introduction of the less expensive and more efficient electric ozonator, however, the use of ozone as a sterilizer will doubtless



*The swimming pool of the Roosevelt School, Fargo, N. D., provides the school children with an opportunity to learn, easily and correctly, how to swim.*



*This beautiful swimming pool is in the girls' gymnasium of the Oak Park and River Forest Township High School, Oak Park, Ill.*

eventually surpass the popularity of chlorine. An efficient chlorinator can be obtained which uses only common salt, water and electric current. This accurately supplies the pool water with the chemically correct amount of chlorine, and maintains the normal alkalinity of the water by introducing into it caustic soda.

This mechanical equipment keeps the pool water clean, sterile and in constant circulation. The active sterilizer, chlorine, remains in the water in imperceptible quantity, but sufficient to destroy any bacteria or organic matter emitted by the swimmers. The resulting water is of suitable chemical purity to pass governmental drinking regulations.

A third method of sterilizing the swimming pool water is found in the use of the ultraviolet ray. The germicidal power of the sun's rays lies in that portion known as the ultraviolet. Sunlight itself contains comparatively little ultraviolet, these rays being almost entirely filtered out by the air, dust and smoke surrounding the earth. Light rays rich in ultraviolet are produced artificially by the use of the quartz mercury vapor lamp. It has been demonstrated beyond question that these rays will kill germs found in water. Acknowledgment of this fact has logically introduced the use of ultraviolet rays as a sterilizing agent in swimming pool water.

The process as finally adopted for the introduction of these rays into the water of the pool is to force a thin film of water, carefully filtered, past the germicidal radiations before it enters the pool. The principal objection to the use of the ultraviolet ray in this connection, however, is the difficulty in obtaining an active residual disinfecting agent in the water of the swimming pool itself. Bacteriologists and sanitary engineers have remained skeptical regarding the actual residual efficiency of ultraviolet rays, although manufacturers of this equipment absolutely guarantee their installations.

#### *Various Types of Scum Gutter*

There has been considerable discussion and controversy regarding the most suitable type of scum gutter, as the overflow channel around the pool is called. In some instances preference is given to a gutter practically on a level with the surrounding pool deck, as in the case of the pool in the North Shore School of Physical Development, Evanston, Ill. This method places the water line only two or three inches below the deck level, affording easy egress from the pool. Any type of gutter gives the occupants of the pool easily accessible hand holds at any point around the edge of the pool.

Other styles of gutter place this detail of construction as an integral portion of the pool

wall, a process that leaves the water level at varying distances below the deck surface, making egress at any point other than by ladders, more difficult.

Ordinarily ladders, either external to the pool wall or recessed into it, are conveniently placed at the four corners of the pool, although this number varies according to the size and requirements of the pool. The process of placing cement steps leading from the deck down into the pool has largely been discontinued as unsafe.

The problem of keeping the deck and the pool walls and bottom in a clean, sanitary condition has successfully been overcome by modern mechanical equipment. The scum gutter allows the water, by a simple raising of the water level, to overflow into the gutters, carrying with it any accumulated refuse collected on the surface. The sides and bottom of the pool are kept free from sediment by the use of a vacuum sediment remover, similar in construction to the vacuum cleaner. This remover may have outlets for attaching it along the sides of the pool or it may be entirely portable. In this way it is possible to keep the pool in a thoroughly clean condition, without draining it.

The deck surrounding the pool is cleaned by mopping and scrubbing in the same way as any other tiled surface.

The up-to-date floor layout places the locker rooms on the same floor and adjacent to the pool room so that as little travel as possible is necessary from the showers to the pool. This is done to minimize the walk from the pool to the locker rooms and also to facilitate the lowering of the bacteria count in the water.

#### *Underwater Lighting Is Innovation*

Undoubtedly the most interesting and beautifying development in swimming pool construction is the recent introduction of underwater lighting. By this process, the illumination of a pool is accomplished by lights of large wattage, placed along the sides and ends of the pool at regular intervals, about eighteen inches below the waterline. The effect of this illumination at night is unique and fascinating. The swimmers, and more particularly the divers, remain clearly visible even at the bottom of the deep end of the pool, their every movement easily and distinctly perceptible. The pleasure of swimming in such an environment is greatly enhanced, and to the spectator the occupants of the pool seem to be moving through air rather than through water. By the use of colored lenses, beautiful and unique effects may be obtained.

Many interesting swimming pools are now in use in school buildings throughout the country.

The Shorewood High School, Milwaukee, presents a striking example. The swimming pool there, installed on the ground floor of the natatorium section, is 75 feet long by 35 feet wide, and is modern in every detail. The water is thoroughly filtered and sterilized, and enters the pool crystal clear. The equipment permits a complete turnover of the pool water every eight hours.

In Chicago the Wilbur Wright Junior High School will have a beautiful pool. The Roosevelt High School is one of the most popular schools in the city and includes an attractive swimming pool in its equipment, as does the Jessie Spalding School for crippled children. In Manitowoc, Wis., the new Lincoln High School boasts of an efficient pool, and the Monroe High School, Monroe, Mich., has also installed facilities for teaching swimming.

No longer must the school boy and girl look to the outside for their swimming instruction. It has found its proper origin, in the school itself.

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### **"Assembly Programs," a Contribution to Secondary Education**

The following review of M. Channing Wagner's "Assembly Programs" was published in a recent issue of the *Teachers College Journal* of the Indiana State Teachers College. It was written by Helen Ederle, assistant professor of education.

"Mr. Wagner, assistant superintendent in charge of secondary education and research, Wilmington, Del., has given a most practical contribution to secondary education in this book. He accepts the following point of view: 'The best approved practice to-day recommends the appointment of an assembly sponsor who directs and prepares assembly programs.'

"Accordingly, after giving a definition of the assembly, underlying principles and aims, a most detailed discussion of the problems of organization such as committees, calendar time and the test of a good assembly follows. This is followed by a classification of the programs into three groups: (1) devotional, instructional, entertaining, esthetic and civic programs; (2) seven cardinal principles; (3) general welfare, current interests, growing out of extra-curricular, growing out of curricular, music, special days, agencies supplementing work of the schools, miscellaneous.

"The most valuable part of the book is the section devoted to detailed assembly programs for a school year of thirty-eight weeks. If these ideas were generally practiced, assembly programs would yield inestimable educational value."



# Tenure and Salaries of Montana School Administrators

*The question—What salaries do the chief administrative officers earn and how long do they serve?—is answered in this study which covers a period of ten years*

BY W. E. MADDOCK, PROFESSOR OF EDUCATION, UNIVERSITY OF MONTANA

THIS study, representing the tenure and salaries of administrative officers of the school districts of Montana of the first, second and third classes which are under the direction of superintendents or principals as chief administrative officers, covers a period of ten years, 1919-20 to 1928-1929. The data have been taken from the Montana educational directories published annually by the state superintendent of public instruction at Helena. Only those school districts have been included in this study for which the data were complete for each year of the ten-year period, except that in a few cases missing items were supplied by school officials on request.

The statutes of Montana provide for three classes of districts, first, second and third. These districts are classified on the basis of total population. All districts having a population of 8,000 or more are districts of the first class. All districts having a population of 1,000 or more and less than 8,000 are districts of the second class. All districts having a population of less than 1,000 are districts of the third class.

The statutes read as follows: "In districts of the first class the number of trustees shall be seven; in districts of the second class the number of trustees shall be five; in districts of the third class the number of trustees shall be three."

Trustees are elected at large by popular vote.

The official title of the administrative officers of districts of the first and second classes is "superintendent." The official title of administrative officers of districts of the third class is "principal." This distinction will be observed throughout this article. One-room rural schools are districts of the third class, but in this study only those districts of the third class that have a number of teachers and a supervising principal are included.

## *Rules Governing the Election of Executives*

In districts of the first and second classes, the superintendent shall be appointed for a term not to exceed three years. His salary is fixed at the discretion of the board of trustees. After his second successive employment, he then shall be considered elected from term to term of three years each thereafter unless the board of trustees shall by a majority vote give notice to the superintendent on or before the first day of February of the last year of his term of employment that his services will not be required for the coming term. In districts of the third class the principal is elected annually except that after a second election to the position, he is likewise considered automatically reelected unless notified on or before the first day

TABLE I—TENURE OF SUPERINTENDENTS IN 7 DISTRICTS OF THE FIRST CLASS, 58 DISTRICTS OF THE SECOND CLASS AND OF PRINCIPALS IN 102 DISTRICTS OF THE THIRD CLASS FROM 1919-20 TO 1928-29.

Years of Service	Superintendents in Districts of the First Class	Superintendents in Districts of the Second Class	Principals in Districts of the Third Class	Total	Per Cent
10	4	11	2	17	2.54
9	1	2	0	3	0.45
8	1	5	2	8	1.20
7	0	3	5	8	1.20
6	0	8	10	18	2.69
5	2	13	14	29	4.33
4	0	20	37	57	8.52
3	0	33	58	91	13.60
2	1	32	128	161	24.07
1	1	35	241	277	41.40
Total	10	162	497	669	100.00
Median	8.5 years	3.42 years	2.06 years		

TABLE II—DISTRIBUTION OF SALARIES PAID SUPERINTENDENTS IN 7 DISTRICTS OF THE FIRST CLASS

<i>Salaries Paid</i>	<i>1919-1920</i>	<i>1920-1921</i>	<i>1921-1922</i>	<i>1922-1923</i>	<i>1923-1924</i>	<i>1924-1925</i>	<i>1925-1926</i>	<i>1926-1927</i>	<i>1927-1928</i>	<i>1928-1929</i>
\$6,000 and over.....	.....	1	.....	.....	1	1	1	1	1	1
5,900 to \$5,999.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
5,800 to 5,899.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
5,700 to 5,799.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
5,600 to 5,699.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
5,500 to 5,599.....	1	.....	1	.....	.....	.....	.....	1	1	1
5,400 to 5,499.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
5,300 to 5,399.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
5,200 to 5,299.....	.....	.....	.....	1	1	1	1	.....	.....	.....
5,100 to 5,199.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
5,000 to 5,099.....	.....	2	1	1	1	1	1	1	1	3
4,900 to 4,999.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
4,800 to 4,899.....	1	1	1	.....	.....	.....	.....	.....	1	1
4,700 to 4,799.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
4,600 to 4,699.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
4,500 to 4,599.....	.....	1	2	3	2	1	1	2	.....	.....
4,400 to 4,499.....	1	1	1	1	.....	.....	.....	.....	.....	.....
4,300 to 4,399.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
4,200 to 4,299.....	.....	.....	.....	.....	.....	1	1	1	1	1
4,100 to 4,199.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
4,000 to 4,099.....	1	1	1	1	2	2	2	1	1	.....
3,900 to 3,999.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
3,800 to 3,899.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
3,700 to 3,799.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
3,600 to 3,699.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
3,500 to 3,599.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
3,400 to 3,499.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
3,300 to 3,399.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
3,200 to 3,299.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
3,100 to 3,199.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
3,000 to 3,099.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Median	4,050	4,850	4,575	4,550	4,575	4,550	4,550	4,575	4,850	5,050

of February that his services will not be required for the following year.

There are seven first-class districts in Montana. The data are complete for these seven districts. Complete data were secured for fifty-eight districts of the second class and for 102 districts of

school district being usually much larger. This renders the school districts free from municipal fiscal control and eliminates the probability of their becoming involved in municipal politics.

Table I shows the median tenure of superintendents of districts of the first class to be 8.5 years, the median tenure of superintendents of districts of the second class to be 3.42 years and the median tenure of principals of districts of the third class to be 2.06 years. Forty-one and two-fifths per cent of the superintendents and principals during the ten-year period served only one year; 65.47 per cent served two years or less; 79.07 per cent served three years or less; 87.59 per cent served for four years or less and 91.92 per cent served for a period of five years or less.

TABLE III—SALARIES IN DISTRICTS OF THE FIRST CLASS FOR "OLD" AND "NEW" SUPERINTENDENTS

<i>Year</i>	<i>Increases</i>		<i>Decreases</i>		<i>Same Salary</i>	
	<i>Old</i>	<i>New</i>	<i>Old</i>	<i>New</i>	<i>Old</i>	<i>New</i>
1920-21.....	6	1	..	..	..	..
1921-22.....	1	..	..	1	5	..
1922-23.....	..	..	2	..	5	..
1923-24.....	1	..	2	..	4	..
1924-25.....	..	..	..	1	6	..
1925-26.....	..	..	1	..	5	..
1926-27.....	3	..	..	..	4	..
1927-28.....	2	..	..	..	5	..
1928-29.....	2	..	..	..	5	..

the third class. In the 1928-29 state educational directory, there are listed seventy districts of the second class and 144 districts of the third class.

A "school district" as defined by law is declared to mean the territory under the jurisdiction of a single board of trustees. There is no necessary relationship between a school district and an incorporated city or village within the limits of that school district. The territories of the two corporations are not coterminous, the territory of the

TABLE IV—AVERAGE ANNUAL INCREASES AND DECREASES OF SALARIES IN DISTRICTS OF THE FIRST CLASS

<i>Year</i>	<i>Increases</i>		<i>Decreases</i>	
	<i>Old</i>	<i>New</i>	<i>Old</i>	<i>New</i>
1920-21.....	\$ 556	\$1,000	.....	.....
1921-22.....	500	.....	.....	\$1,500
1922-23.....	.....	.....	\$250	.....
1923-24.....	1,500	.....	238	.....
1924-25.....	.....	.....	.....	250
1925-26.....	.....	.....	50	.....
1926-27.....	250	.....	.....	.....
1927-28.....	275	.....	.....	.....
1928-29.....	625	.....	.....	.....

TABLE V—DISTRIBUTION OF SALARIES PAID SUPERINTENDENTS IN 58 DISTRICTS OF THE SECOND CLASS

<i>Salaries Paid</i>	1919-1920	1920-1921	1921-1922	1922-1923	1923-1924	1924-1925	1925-1926	1926-1927	1927-1928	1928-1929
\$4,200 and over.....										1
4,100 to \$4,199.....					1	1	1			1
4,000 to 4,099.....		1	1	2	1				2	1
3,900 to 3,999.....										
3,800 to 3,899.....				1				2	1	1
3,700 to 3,799.....		2	2	1			1	1	1	1
3,600 to 3,699.....	1	2	2	3	5	4	2	3	3	2
3,500 to 3,599.....		1	1	1		2	4	3	2	2
3,400 to 3,499.....		1	1	1	2	2	2	1	1	2
3,300 to 3,399.....	1	3	7	2	1	2		1	2	6
3,200 to 3,299.....	2	1					2	2	5	1
3,100 to 3,199.....		2	1	1				3	1	1
3,000 to 3,099.....	6	16	14	13	16	11	14	12	10	11
2,900 to 2,999.....		3		1			1	1	2	1
2,800 to 2,899.....	4	2	5	8	5	7	6	2	1	2
2,700 to 2,799.....	1	4	1	1	4	7	4	6	6	7
2,600 to 2,699.....		2	1	6	4	2	2	4	5	3
2,500 to 2,599.....	7	8	10	5	6	7	8	6	4	3
2,400 to 2,499.....	9	5	7	7	8	6	5	4	4	3
2,300 to 2,399.....				1	1	2	1		1	1
2,200 to 2,299.....	6	3	3	1	2	5	2	5	3	4
2,100 to 2,199.....	3			1					1	2
2,000 to 2,099.....	4	2		2	2		2	1	3	2
1,900 to 1,999.....	3							1		
1,800 to 1,899.....	8						1			
1,700 to 1,799.....	1									
1,600 to 1,699.....										
1,500 to 1,599.....	2									
Median .....	\$2,422	\$3,000	\$3,014	\$2,863	\$2,840	\$2,800	\$2,867	\$2,900	\$2,950	\$3,009

Viewing the situation from another angle, it was found that in the ten years one district of the third class had nine principals; seven districts had eight principals each; eleven districts had seven principals each; fifteen districts had six principals each; nineteen districts had five principals each; twenty-eight districts had four principals each; seventeen districts had three principals each; two districts had two principals each and in each of two districts only one principal remained for the full ten-year period. The tenure is considerably better in districts of the first and second classes.

Table II shows the distribution of salaries paid superintendents in the seven districts of the first class. The interesting feature of this table is the large increase of the median salary in 1920-21 over that of the year 1919-20, presumably due to the influence of war prices. Then follows a decline

in the median salary for the next few years presumably due to the business depression and the consequent shrinkage of school funds, which made it necessary for many school districts to find some way to retrench. The last three years of the period show a decided rally of the median which in the year 1928-29 reached its highest point, \$5,550.

Table III shows the number of increases and

TABLE VII—AVERAGE ANNUAL INCREASES AND DECREASES OF SALARIES IN DISTRICTS OF THE SECOND CLASS

<i>Year</i>	<i>Increases</i>		<i>Decreases</i>	
	<i>Old</i>	<i>New</i>	<i>Old</i>	<i>New</i>
1920-21 .....	\$552	\$425	....	\$120
1921-22 .....	274	266	\$203	325
1922-23 .....	254	317	312	311
1923-24 .....	228	550	296	321
1924-25 .....	193	400	250	384
1925-26 .....	211	100	....	583
1926-27 .....	216	200	....	333
1927-28 .....	163	800	....	697
1928-29 .....	113	500	100	359

TABLE VI—SALARIES IN DISTRICTS OF THE SECOND CLASS FOR "OLD" AND "NEW" SUPERINTENDENTS

<i>Year</i>	<i>Increases</i>		<i>Decreases</i>		<i>Same Salary</i>	
	<i>Old</i>	<i>New</i>	<i>Old</i>	<i>New</i>	<i>Old</i>	<i>New</i>
1920-21.....	42	12	..	1	2	1
1921-22.....	11	6	2	6	33	..
1922-23.....	8	3	11	8	24	4
1923-24.....	14	1	8	7	24	4
1924-25.....	13	2	3	10	28	2
1925-26.....	22	1	..	6	29	..
1926-27.....	20	1	..	10	25	2
1927-28.....	25	1	..	5	25	2
1928-29.....	27	1	1	6	22	1

the number of decreases in salaries and the salaries that remained the same, for "old" superintendents (those who succeeded themselves) and for "new" superintendents (those serving their first year in the position), in districts of the first class. "Increase" for a "new" superintendent means an increase over what his immediate predecessor received at the time he held the same position.

Table IV shows the average annual increases



TABLE VIII—DISTRIBUTION OF SALARIES PAID PRINCIPALS IN 102 DISTRICTS OF THE THIRD CLASS

<i>Salaries Paid</i>	1919-1920	1920-1921	1921-1922	1922-1923	1923-1924	1924-1925	1925-1926	1926-1927	1927-1928	1928-1929
\$3,500 and over.....			1	1						
3,400 to \$3,499.....										
3,300 to 3,399.....										
3,200 to 3,299.....										
3,100 to 3,199.....									1	
3,000 to 3,099.....		3	5	1	2	2	1	2	3	2
2,900 to 2,999.....			1	1						
2,800 to 2,899.....		4	2	2	2	2	1	2	1	3
2,700 to 2,799.....		2	2	2	3	1		1	2	4
2,600 to 2,699.....		1		1			3	2	3	2
2,500 to 2,599.....	1	4	8	7	6	6	7	8	8	10
2,400 to 2,499.....	3	4	11	4	8	6	10	7	6	8
2,300 to 2,399.....		3	2	1	2	4	4	2	4	3
2,200 to 2,299.....	2	10	6	10	9	9	9	10	11	11
2,100 to 2,199.....	3	2	6	4	6	5	6	6	6	12
2,000 to 2,099.....	7	22	17	15	12	15	12	16	21	13
1,900 to 1,999.....		3	3	2	5	2	5	7	6	6
1,800 to 1,899.....	11	22	17	26	24	26	22	22	16	15
1,700 to 1,799.....	2	1	3	2	3	4	3	6	1	3
1,600 to 1,699.....	6	6	4	7	6	4	3	2	4	2
1,500 to 1,599.....	13	9	6	6	5	7	10	4	3	2
1,400 to 1,499.....	9	3	3	2		2	1			1
1,300 to 1,399.....	21	2	2	3	4	1		1	3	2
1,200 to 1,299.....	11		1	3	4	5	3	3	2	2
1,100 to 1,199.....	10	1	2	1	1		2	1	1	1
1,000 to 1,099.....	2					1				
900 to 999.....	1			1						
Median .....	\$1,467	\$2,018	\$2,059	\$1,900	\$1,980	\$1,950	\$2,017	\$2,031	\$2,071	\$2,133

and decreases of salaries of superintendents, "old" and "new," in districts of the first class. In case only one increase or decrease occurs in a given class the amount is given as if it were an average. This is also true of the two similar tables for districts of the second and third classes.

Table V shows the distribution of salaries paid superintendents in fifty-eight districts of the second class. As in districts of the first class the median shows a large increase for 1920-21, but the

interesting to note that in 1920-21 all "old" superintendents except two and all "new" superintendents except two received increases and the only decrease in salary was for one "new" superintendent. Only three salaries remained the same. In 1922-23 there were only eleven increases, but there were nineteen decreases. Twenty-eight salaries remained the same.

#### How Salaries Fluctuate

Table VII shows the average annual increases and decreases of salaries of superintendents, "old" and "new," in districts of the second class. Note the tendency for the average increases to decline and the average decreases to mount from year to year.

Table VIII shows the distribution of salaries paid principals in districts of the third class. This salary includes salaries for both men and women

TABLE IX—SALARIES IN DISTRICTS OF THE THIRD CLASS, FOR "OLD" AND "NEW" PRINCIPALS

<i>Year</i>	<i>Increases</i>		<i>Decreases</i>		<i>Same Salary</i>	
	<i>Old</i>	<i>New</i>	<i>Old</i>	<i>New</i>	<i>Old</i>	<i>New</i>
1920-21.....	44	54	1	2	1	..
1921-22.....	30	12	4	14	21	21
1922-23.....	16	4	12	33	23	14
1923-24.....	24	14	1	18	26	17
1924-25.....	20	7	6	21	34	14
1925-26.....	32	5	2	17	30	16
1926-27.....	28	7	..	16	31	20
1927-28.....	36	11	1	20	30	14
1928-29.....	39	5	2	19	30	7

highest point is reached in 1921-22—\$3,014. Then follows a decline for three years and, following this, there is a rally of the median for the last four years of the period when it reaches \$3,009 for 1928-29 which is \$5 less than the high point of 1921-22.

Table VI shows the number of salary increases and decreases and the number of salaries that remained the same for both "old" and "new" superintendents in districts of the second class. It is

TABLE X—AVERAGE ANNUAL INCREASES AND DECREASES OF SALARIES OF PRINCIPALS, "OLD" AND "NEW," IN DISTRICTS OF THE THIRD CLASS

<i>Year</i>	<i>Increases</i>		<i>Decreases</i>	
	<i>Old</i>	<i>New</i>	<i>Old</i>	<i>New</i>
1920-21 .....	\$452	\$511	\$540	\$255
1921-22 .....	316	310	215	401
1922-23 .....	202	153	202	372
1923-24 .....	144	217	200	304
1924-25 .....	155	196	158	266
1925-26 .....	171	212	80	172
1926-27 .....	177	294	...	209
1927-28 .....	172	225	45	221
1928-29 .....	153	237	50	190

TABLE XI—DISTRIBUTION OF SALARIES PAID WOMEN PRINCIPALS IN DISTRICTS OF THE THIRD CLASS

<i>Salaries Paid</i>	1919-1920	1920-1921	1921-1922	1922-1923	1923-1924	1924-1925	1925-1926	1926-1927	1927-1928	1928-1929
\$2,200 and over.....					1		1	1		
2,100 to \$2,199.....			1	1						
2,000 to 2,099.....		1				1				
1,900 to 1,999.....			1							
1,800 to 1,899.....	1	3	2	2	1	2	2	2	1	1
1,700 to 1,799.....		1	2	1						
1,600 to 1,699.....	1	1		2	2				2	1
1,500 to 1,599.....	1	4	2	2	1	1	2	1		
1,400 to 1,499.....		3	2							1
1,300 to 1,399.....	3		1	3	2	1			1	
1,200 to 1,299.....	5			2	2	2	2	3	2	2
1,100 to 1,199.....	7	1	2	1			1			
1,000 to 1,099.....	1					1				
Total .....	19	14	13	14	9	8	8	7	6	5
Median .....	\$1,230	\$1,575	\$1,575	\$1,550	\$1,550	\$1,450	\$1,550	\$1,550	\$1,500	\$1,450

principals. As was noted in districts of the first and second classes there is a large increase in the median salary for 1920-21 over that of the previous year. There was a further increase for the year 1921-22 followed by a decline. Then there was a rally during the last four years. The high point was reached in 1928-29 when the median salary reached \$2,133.

Table IX shows the number of salary increases and decreases and the number of salaries that remained the same for both "old" and "new" principals in districts of the third class. Here again for 1920-21 is a general increase in salaries as indicated by the large rise of the median. Ninety-eight salaries were increased, three were decreased, and only one salary remained the same as the previous year. In the following years there are many decreases in salaries and many salaries remained the same for both "old" and "new" principals.

#### *Women Serve Largely in the Third Class*

Table X shows the average annual increases and decreases in salary of principals, "old" and "new," in districts of the third class. Notice again the tendency for the average increase to decline from year to year. Contrary, however, to what was shown for districts of the second class, the average decrease also shows a tendency to decline.

Table XI shows the distribution of salaries paid women principals of districts of the third class. (There were no women superintendents in districts of the first class and only two women superintendents in the fifty-eight districts of the second class included in this study). The median salary for 1920-21 shows a large increase over the previous year and in this year and the year following we find the high point to be at \$1,575 for each year.

There were nineteen women principals employed

in the 102 districts of the third class included in this study, for 1919-20. The number of women employed as principals decreased from year to year until for 1928-29 there were only five employed in the 102 districts of the third class included in this study, although there were several women employed in other districts of the third class.

### Summer, Not Spring, Is the Time for School House Cleaning

House cleaning in the schools is a summer rather than a Spring occupation, says *School Review*. No sooner has the last straggling child cleaned out his desk, salvaged books and hoarded treasures from his locker and departed through the school doors to summer time, than the house cleaning program is on.

Floors are cleaned and oiled, windows and walls are washed, furniture is cleaned and varnished. Painting is done. Repairing plays a large part in the summer program. In one building new floors may be needed; in another new plumbing must be installed. Furniture will be found that is in need of repair; there will be bent doors on lockers to be straightened. Ventilating systems will be checked up throughout the system, and city inspectors will examine the steel boilers of the heating plants of all the schools.

Some remodeling must be done. In one old school it may be possible to make two small classrooms from one large old-fashioned room; in another building the unused end of a corridor may be converted into convenient office space.

Children will enter spick and span schools in the Fall. Floors and furniture will glisten with fresh paint and varnish, for the summer house cleaning program should be an attic to cellar affair guaranteed to make the schools a pleasanter place for the pupil to live and learn in.

## *Schoolhouse Planning:* Organizing to Carry On the School Plant Program

*Five methods for conducting research to determine future school needs are here described and weighed in the light of their advantages and disadvantages*

By ARTHUR B. MOEHLMAN, PROFESSOR OF SCHOOL ADMINISTRATION AND SUPERVISION, SCHOOL OF EDUCATION, UNIVERSITY OF MICHIGAN

**A**FTER the relationship of the school plant to the instructional organization has been determined and the educational policies that the physical plant must satisfy have been developed, the third activity is the formulation of the means of procedure through which research is to be conducted.

The first problem the superintendent encounters at this point is the selection of the method by which to carry on the program. In general, there are five methods from which the executive may choose. These are the centralized plan, the decentralized plan, the cooperative method, the outside survey and the consulting service.

The centralized method of procedure is essentially an autocratic one. The superintendent, either himself or through an executive assistant, proceeds to survey field conditions. The technique and the specific procedure are developed

by the individual engaged in the activity and carried out by him with such clerical or other assistance as may be required. Principals and teachers are used only when it is impossible to secure results in any other way. The general procedure is to take the essential information from executive records or to make independent field studies of conditions. Field agents operate independently of principals or division heads and secure most of their field data directly. As a rule, no one else in the organization knows what is going on. Even with the most diplomatic and suave field agents, it is impossible by this procedure to prevent suspicion from being aroused on the part of nonassisting agents. Many peculiar local situations are much better known to principals after their years of experience in a particular locality than to independent individuals who have made only minor periodic contacts.



*This school is a pleasing example of what careful planning and choice of materials can do.*



After field data are collected, they are analyzed by the executive in charge. Conditions are appraised and recommendations projected. The entire result is an isolated executive action that neglects many of the important factors, particularly those that affect public relations.

The centralized procedure is feasible in very small school systems where the executive has an excellent control over modern school plant program procedure. In districts of more than 10,000 population, its use is debatable.

The decentralized plan represents the opposite extreme. Its development is due to a misconception of democratic organization. In brief, this is the method whereby the executive appoints a committee of principals and teachers, describes the general school plant problem to them and then allows development to proceed in terms of their own ability and initiative. This method is more frequently employed in activities other than the school plant program. When the executive does not care to assume leadership in salary increase, tenure and retirement allowance campaigns, the decentralized method is most frequently used. It is seldom officially nominated as such, and frequently it is difficult to discover exactly who promoted the plan initially. While it is infrequently employed with relation to the school plant program, its dangers and possibilities should be carefully considered in each case. More recently another element has entered the field through this method. This is the unofficial stimulation of parent-teacher associations, either in conjunction with principals and teachers or independently to make emotional demands for additional physical facilities.

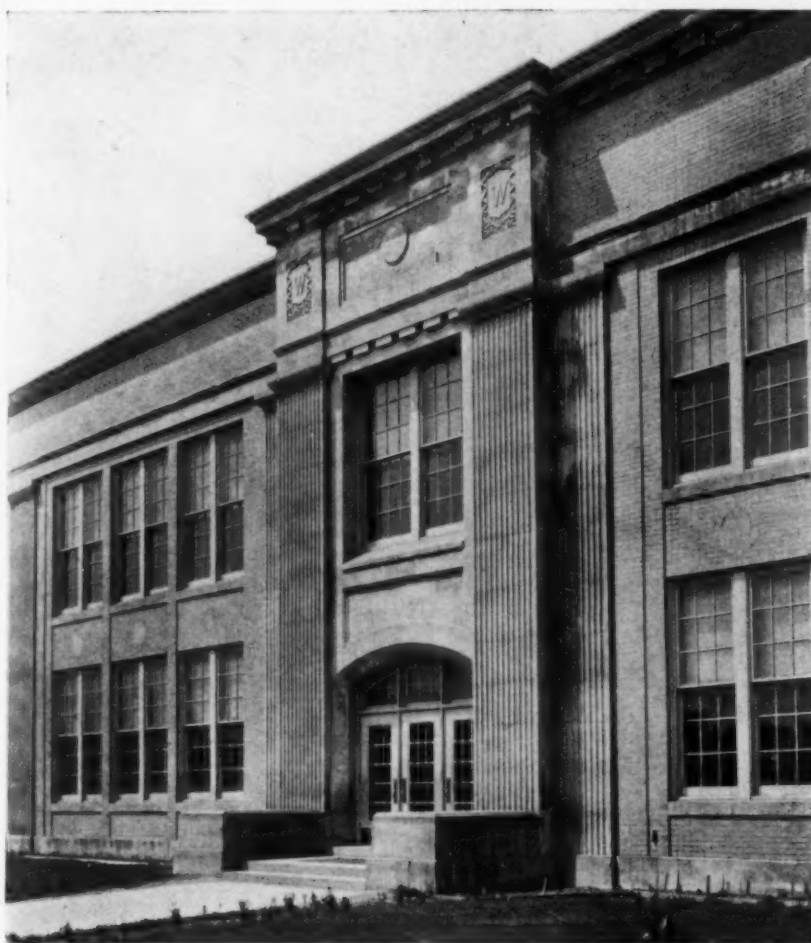
The chief advantages of this procedure are the stimulation of interest and activity on the part of a large number of individuals and a correspondingly large support of a financial program by members of the professional organization and their friends. This is a feature worth considering and embodying in other possible procedures.

The disadvantages are that the procedure is developed and carried out, as a rule, by individuals inadequately

trained in the technique of school plant planning. Their lack of control over the method results in many peculiarities. Without constructive leadership, they tend to see only the problem in their immediate locale rather than the problem of the entire district. The appeal is more frequently based upon emotion than upon facts. The securing of the active support of different groups means generally the entrance of a bargaining or trading factor.

One portion of the district will

support another section only if all of its demands are met. Since these several demands tend to be subjective in character, a school plant program developed by this method generally neglects vital interests of nonvociferous sections and places in the school plant budget many items of questionable value. The entrance of political interests tends to reduce objectivity to a minimum and produces results that are far from adequate. While the educational value of this plan should be given careful consideration, it possesses many more weaknesses than the first method and it cannot be recommended under any conditions except for use in conjunction with and as a correlated part of other procedures employed in school planning.



*The entrance detail of an elementary school indicates how a satisfactory architectural effect can be secured at little expense.*

The cooperative plan is a more happy combination of the centralized and decentralized methods. It may be considered as a democratic organization of a procedure whereby leadership and technique are supplied by individuals trained and experienced in this field, at least to some extent, assisted by principals, teachers, children and community leaders. General policy and plan are supplied by the leaders while the routine and the detailed task of collecting data are delegated to field agents who are familiar with their own local problems. Specific local needs are correlated and adjusted to the general policy by the executive leaders who see the entire problem in its proper perspective while the subordinate members are thoroughly impressed with their specific and immediate requirements. So long as principals are paid upon the basis of building size, it is only human to expect that these field executive agents will be concerned to some extent in increasing the size of their respective plants, regardless of ultimate need and location.

Further advantages accrue if this plan is carried out completely. Interest is aroused by activity and by the hope of tangible rewards either through personal recognition, an actual money grant, a prospective promotion, or an increase in the size of the field position through plant enlargement. Education to school plant needs results from participation. After the field data have been gathered, analyzed by the executive leaders and the program or recommendations developed, all of the major field agents should be given further education by having presented to them the tentatively complete program for consideration and criticism. At these conferences, decisions affecting certain sections may be explained. The general policy may be presented again and differences of opinion threshed out. Such a procedure has the value of educating all field agents and of eliminating differences that might affect the completed program after the superintendent has brought his report to the board of education. It is the experience of most research men that theoretical technique may be improved through critical contact with individuals who are immediately concerned with and responsible for the problem in practical operation.

#### *The Outside Survey*

The procedure is feasible in practically any school district. Certain minor changes must be made in large districts because of size and difference in organization. Division or district superintendents, rather than principals, would be subchairmen of local groups in large districts.

Each district superintendent in turn would work with committees of principals under his direction and these in their turn would work with the teachers within their own buildings. The principle does not change, but the specific organization would be affected by size.

The apparent disadvantages of the procedure are that it requires more time by the cooperative than by the centralized method. It also requires a new technique for its administration upon an intelligently organized democratic basis. The club of compulsion is superseded by the soft glove of intelligent leadership. A third and really important disadvantage is that most school systems are not large enough to have in their employ a technical school plant specialist. As a result, many costly errors may be made by the executive in charge who is not capable of developing the school plant needs intelligently and economically. With this exception, the cooperative method has many points of strength that make its selection worthy of careful consideration.

#### *Developing Program Outside the School System*

The fourth procedure is the development of the school plant program by specialists outside of the school system. While such service is most frequently furnished by members of university staffs, commercial organizations have entered the field in recent years and many architects now offer the services of an "educational engineer" to a school district, apparently free of charge. Since few boards of education are able to resist the appeal of "something free," the commercial concern with a definite and legitimate commercial interest is furnishing outside survey service more frequently each year.

The characteristic of the outside survey is that the program is developed by whatever type of specialist is employed, independently of the school organization and is presented to the board of education as purely objective findings. While the outside specialist may be used in a number of ways, the most characteristic is the presence of a specialist and a staff of subordinates who conduct field surveys and correlate these data into a complete program from which the specialist prepares the summary of recommendations. These field workers are generally graduate students in education and they undoubtedly secure much benefit from the experience. On the other hand, a board of education is seldom willing to make for these services a direct cash outlay sufficient to cover the cost. As a result, much of the outside survey is so-called "high-spotting" and "low-spotting," or a partial survey covering the most salient factors. In terms of money allow-



*In this well lighted cheerful school library the boys and girls spend many happy profitable hours.*

ance, it is usually well done. An intensive and complete survey is expensive. Much time and effort are required by high priced specialists to develop the basic studies that are essential to a complete analysis. The layman cannot understand why statistical procedures, of which he sees only a few complicated tabulations, should be so costly. Although the expenditure of funds sufficient to carry out a detailed survey may be returned tenfold in the avoidance of costly errors, either in location or school plant planning, it is difficult for the average board member to visualize it and it is to be regretted that superintendents have not educated the board members to the true value and cost of objective research.

The disadvantages of the outside survey are numerous. Apart from the usual inadequate finance, which results generally in a "high-low-spot" procedure, the psychology of this method is poor. Neither executive nor staff receives the benefit of training in technique or in understanding of need. The outside specialist arrives, performs his task, makes his report and leaves. The training of the personnel to carry on the work, the delicate adjustment of the program to local conditions and the participation of the staff in the program are generally grossly neglected.

The outside specialist is often inadequately informed of local peculiarities and in some cases actually lacks the essential training for the work at hand. Many of these specialists make serious criticisms of local conditions and policies. It is quite true that both are frequently deserving of comment from a purely theoretical point of view. On the other hand, a survey should have as its basic purpose the improvement of conditions, and so long as our local psychology of "community pride" is as it is, a different technique must be employed. The community and the professional organization react rapidly and with much emotion if the "bread and butter" interest is endangered. The community feels criticism keenly. Opposition papers imbued with the "news-sin-complex," discordant political factions and disgruntled individuals generally make excellent capital out of the report. After a careful study of outside survey procedure, I have come to the conclusion that the outside survey is justified only when the board of education has lost faith in the administration and seeks impartial evidence of conditions within the system. This condition seldom need arise with respect to the school plant program.

In the last analysis, the superintendent as the

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responsible executive must be entrusted with control of the means of procedure and the development of the school plant program. If he neglects this duty, he is more than likely to destroy his leadership and the confidence that the board of education should have in him. Few executives can afford an outside survey without serious professional injury. In making this

The fifth method of survey organization is the use of the outside specialist, but upon a radically different basis from that evolved in the traditionally accepted outside survey. The need for the specialist remains; yet the earlier use of his services, as an independent worker, will not suffice. The hurdle may be surmounted by the application of a basic principle in unit organiza-



*The spacious Lincoln Junior High School, Rockford, Ill., is an imposing example of the classic style in architecture.*

statement, I fully appreciate that it is contrary to the doctrine preached by many of my colleagues. Careful study of the history of the outside survey movement, added to my actual experience in the field, makes this conclusion unavoidable. Although the result may be due to the psychological effect rather than to the intent upon the part of any specialists, yet results are difficult to avoid.

The fact is also obvious that many of the detailed and intricate problems of public school administration are far beyond the understanding of the school executive. He may have general knowledge of both theory and practice and yet be incapable of making adequate specific application. The curriculum, the school plant, finance, child accounting and public relations are all today highly specialized fields whose successful organization requires much more than general training. The superintendent, by the very nature of his work, cannot be a completely trained specialist in all fields. His work requires general knowledge and the ability to see the complete problem and to correlate all of its aspects in a working program. On the other hand, the highly specialized individual or research man seldom makes a good executive. The problem, however, of meeting specialized needs as they arise still exists. In large city systems, this is possible through the employment of staff specialists who are efficient in their respective fields. In the small and medium sized school systems, it is financially difficult, if not impossible, to employ a staff of specialists. To meet these conditions, some other means must be provided.

tion, namely, that each of the specialized agents or agencies which, because of the factor of size, become essential to the best working of plans and procedures, be regarded as operating solely under authority delegated from the larger executive function and, therefore, for purposes of administration, directly and completely under the control of the executive with respect to selection, reporting and dismissal.

#### *Consulting Service and How It Functions*

The position of the specialist under the application of this principle is his temporary employment, subject to approval by the board of education, as a technical adviser or consultant to the superintendent. His work should be that of technical leader, to develop means of procedure and to check the results, but the superintendent must be responsible for the actual approval of the organization and administration of the problem within the system. Accurately described, the outside specialist is an executive assistant, deriving his authority from the superintendent, reporting to and completely responsible to him. Working under this plan, the specialist may supplement the work of the superintendent by giving to him the benefit of his special training and skill in solving the immediate problem. He can educate him to the degree of understanding and skill essential to the administration of the problem and he can train agents within the system to carry on after he has completed his task and left the community.

The outside specialist, as an integral part of the organization, is considered without the re-

serve and suspicion that attaches to the same individual when he is engaged in outside survey. Friction is eliminated if the specialist possesses administrative intelligence to any degree. Orders are issued only by the superintendent and the responsibility rests with him. Finally, the use of the outside specialist as a unit within the organization, makes it possible for the superintendent and the staff to have their power and their prestige enhanced, for in the most successful use of this method the specialist remains anonymous and the product is credited to the organization through the superintendent. The school system gains the services of a highly skilled specialist at a reasonable financial outlay and the actual work is carried on under his direction through the regular organization. While the real cost is ultimately the same or possibly somewhat greater than in the case of the outside survey, much of it is carried as a regular or overtime activity of the entire organization and the immediate cash outlay is much smaller.

Consulting service organized in terms of the principle enunciated is, I believe, the only completely successful method by which outside specialists may be constructively used. From the standpoint of the specialist, the result may not be immediately so desirable. There is more hard work and less personal publicity than through the outside survey. The successful specialist must subordinate himself rather completely to the organization and receive his reward largely in terms of satisfaction in the general results secured. When consulting service and the co-operative method are combined within any organization, the most productive results are possible.

### Why the Administrator Should Keep Himself "Budget Conscious"

The school administrator keeps himself constantly "budget conscious." The public scans the budget once a year; the school administrator has it with him always. This point is well made by W. F. Willoughby, eminent economist, who is quoted in the *Detroit Educational Bulletin*.

"Another distinction that is of importance is that between a budget and a budget system," Professor Willoughby says. "A budget is but a document; a budget system is one that makes use of a budget as the central instrument of financial administration. Viewing the problem from the latter standpoint, it will be found that a budget system embraces three distinct phases: (1) the formulation of the budget, which com-

prehends two features—the authority by whom the budget should be formulated and the character of its contents; (2) action upon the budget, which takes the form of adopting its recommendations in whole or in part through the passage of revenue and appropriation acts; and (3) execution of the budget, or, to speak more accurately, the putting into effect of the provisions of the revenue and appropriation acts."

### What Massachusetts Teachers Did With Four Acres of Land

Four years ago, four acres of land and a full equipment of buildings, once an attractive estate fifteen miles south of Boston, were given to the teachers of Massachusetts. To-day the four acres have been expanded to 112, the buildings have been reconditioned and modernized and the Riverbank Lodge, a professional country club, owned and maintained by the teachers, is one of the show places of the state.

The teachers own in their own right this valuable plant without a dollar debt and they have a bank account that assures maintenance and continued development.

### A Study of the Problems of Financing the Schools

At a recent meeting of the commission on state aid for public schools in Indiana a report entitled "The Distribution of State Funds for the Purpose of Equalizing Educational Opportunities in Indiana" was presented by J. W. Jones, director, division of research, Indiana State Teachers College, and R. W. Holmstedt, assistant professor of education, bureau of cooperative research, school of education, Indiana University. This report should prove to be of great interest to persons studying the problems presented in financing the public school system. The following is abstracted from the foreword:

1. The principles of state school support are summarized in this report.
2. Since disbursement of state funds must be made on some unitary basis, a measure of educational need is proposed.
3. A state program of education for Indiana is defined in financial terms.
4. Differences in the ability of communities to support schools are illustrated.
5. The amount of state and local funds necessary to equalize the burden of the proposed minimum program is given for each school corporation in Indiana.

# The Kinship of the Notes of Music and the Notes of Business

*In his study of music, the child learns to start on time, to stop on time, to remain true to pitch; later these habits contribute to his success in business*

BY R. F. MARQUIS, CASPER, WYO.

MUSIC did not always enjoy the dignity and attention it now receives. A love of music was thought to be a mark of femininity and music a thing to be used sparingly. The church, however, came to recognize its potent force and for years assumed an almost exclusive supervision of its use. Then popular education came along and stirred in the fomenting leaven of progress. As a result of this advanced step taken by popular education music to-day ranks third in importance among all the professions. It now occupies an important place in our civic life.

Music springs from primitive impulses. The music of any people may be as accurately classified as may be the hopes, the longings and the ambitions of that people. A people rich in traditions and legends is always a people rich in music. Legends are expressions of our hopes, our desires and our yearnings. Legends open the valves of ambition and enthusiasm and urge us onward. History comes stalking with cold, calculating pencil to record the facts of accomplishment. Legends are what we hope to be; history is what we are. Militant Germany reared her ambition with "Deutschland Uber Alles" and history gives record of the result. Ireland finds solace in her "Come Back to Erin." The "Marseillaise" fired the troops of France with an ambition that changed the history of mankind. England had her "Rule Britannia." The sectional South had her "Dixie" and the North, its "Yankee Doodle." The sailor has his chantey and the plainsman his song of droning narrative, which persistently "Buries me there on the lone prair-ee" in something like twenty-three verses.

## *Music Teaches Coordination*

Music is recorded and studied by means of symbols—notes. Each note is a potential tone that may be borrowed for a certain length of time and used by the borrower with profit. It may be high or low, loud or soft, owing to the concentration of mind and the force demanded by it.

I have at different times and in different cities been entertained by the pupils of the public school. I have heard rhythm coordinated with tone, mind coordinated with action in a manner that was little short of marvelous. I have heard children in the earliest grades of learning. Some of them blew whistles; some struck steel bars; some manipulated tambourines. Each performer did his part with astounding precision. It is probable that these children had not yet begun their study of the actual black notes of music. They had but little knowledge of the methods employed in giving voice to the intervals indicated on the musical staff by black notes. They had, however, been taught the potential value of the things assigned to each to do, and each did his particular work in strict coordination with the work of his fellows.

## *How Pupils Learn to Cooperate*

The ringing of a bell, the blowing of a whistle: Could these be of any particular value to the performers? Yes, for each was being taught the value and importance of doing the thing assigned at exactly the right moment and for the correct duration of time. As years go on, some may learn to read music readily while some may not. Some may become expert at translating their black notes into pleasing melodies; others may not. It makes no difference. All will have been taught the importance of doing in harmony with their fellow pupils the thing at hand to be done. They will all have been trained to begin on time, to stop on time and to keep true harmony in tune with their fellows. They will have been taught to do the right thing at the right time. In what manner may one be better fitted for the problems of life? Does not the success of a useful and well lived life depend upon one's doing the right thing at the right time?

In nature there are no dissonances. God organized an orchestra of varied instruments whose harmonies are being disseminated constantly. Each instrument utters a distinct tone;



each has a distinct pitch; each makes use of black notes of different duration and intensity; yet for more than nineteen hundred years there has not been uttered a single discord. Nature is in harmony. The man or woman who gets out of tune with nature is alone, out of place. By training children in the value and intervals of their black notes, the public schools are teaching at the same time lessons of harmony and the value and the necessity of beginning their obligations on time and ending them on time. They are also giving to them the privilege of being a part of God's great orchestra.

"Readin', writin' and 'rithmetic" have lately welcomed into their exclusive family a fourth member, music. The new member perhaps is the most clearly understood and the most enjoyable of them all. Youth learns to master its black notes, learns to start on time, to stop on time and to remain true to pitch. Manhood thus trained continues to practice the learning and training of its youth. Manhood borrows potential value. Manhood reverts to the use of notes, obligations of designated duration. These must be harmoniously kept with the same zeal that characterized the diligence with which youth kept its black notes of music. Here we have one of the marks of citizenship.

Each year this nation devotes an entire week to the observance of musical performances. What is it all about? What prompts us to contract potential values, to give notes, to contract taxes and bonds in order that children might ring bells, blow whistles and beat drums before various bodies of representative citizens? Why do patient teachers devote hours each day to the drilling of pupils of various ages in the use of black notes of music? What return are we to expect from our investment? What is the objective of all this great investment of time and money?

#### *What Are Objectives of School Music?*

Some years ago the National Education Association propounded to itself this same question. A committee of prominent educators was appointed to ascertain the objective of all this work, this study and outlay. Here is the answer of the committee:

- First, health
  - Second, fundamental skill
  - Third, worthy home membership
  - Fourth, vocation
  - Fifth, citizenship
  - Sixth, advantageous employment of leisure time
  - Seventh, ethical character
- Visualizing the group of pupils that passes out

of high school and into our business world each year we would assume a class of healthy men and women, able to think straight and give deed to their thought, ever thoughtful of the ties of home, especially trained in some line of useful work, willingly accepting the responsibilities of citizenship, employing their leisure hours to some enjoyable and elevating purpose and employing the principles of the Golden Rule in their everyday business.

#### *Why Singing Is Healthy Exercise*

By profession I am an actuary. My business leads me into the cold facts and figures of actualities. Our mortality tables show that those who employ their learning of black notes of music throughout life enjoy better health and greater longevity than do those whose lungs and intercostal muscles are not systematically exercised by the deep breathing required in singing. Tuberculosis and its allied pulmonary disturbances are much less prevalent among those who sing. The black notes of youth are an almost specific antidote for neurasthenia, so frequent in older ages. The homely old melody that Mother crooned over the cradle erased more childhood pain and assuaged more little troubles than the doctor's nostrums.

What more effective lesson in patriotic citizenship could be imagined than the vow of allegiance to our flag we lisped years ago, and then joined with our classmates in singing "America"? A citizenship thus acquired is a citizenship whose sacred obligations will never be forgotten.

We are all slaves to our various lines of business. The path between Home and Office must be well worn. Success comes only as a prize for greatest efficiency. At the first sign of failure some one better fitted steps in to turn our failure into success. The story of success is pleasing. Success is an impelling motive, a driving force. Work commands our time and thought. We are willing slaves, but when the hours of business are over, when the school day has closed, what then? When we are unrestricted and free, where then are we found? How do we employ our leisure?

Here is the test of manhood or womanhood. We are either seekers after cleanly and elevating entertainment, or we are seekers after the damp dark places where bats and beetles abound. Here is where music functions in its fullest measure. Here man never forgets the black notes of his youth, and their influence is ever potent. Susie in the front room strumming "My Souvenirs" on the piano, Jimmie consigned to the basement there to wrestle with a moaning saxophone, pre-

sent a far more alluring picture than Susie on the street and Jimmie down with the gang across the railway track. Music is a pretty good warranty against a wasted life.

Not long ago I attended a gathering at which more than five hundred persons were present, persons who at that time were through with the business cares of their day. They were free and at leisure. No one seemed to be in charge. There appeared to be no need of such a person. The story of an opera was being told. The theme was being illustrated and its characteristic music performed. The story was beautiful. The music was enchanting. The surroundings were wholesome and pleasing. Five hundred people sat in silence, giving rapt attention lest some word, some black notes of music slip by unnoticed and unenjoyed. Aria was supplemented with act, mood was portrayed by melody. The minds and souls of five hundred persons were filtered through the fine screens of beauty and rinsed with a cleanly ecstasy. Five hundred souls left this recital with a higher conception of the duties of life, and of their individual behavior toward their fellows. Home membership, ethical character, citizenship, all were brought to a better vision, and each soul viewed life anew. Acts and deeds assumed a more pleasing influence upon future thought. And thought, being a godfather to our individual acts and deeds, was here placed upon a higher plane and in actual harmony with the orchestra of nature.

Sister vocalizing, screeching her black notes, sometimes extends an annoyance far beyond the family threshold. Bad as they may be, sister's vocalizings are much more pleasing to the ear than the phone call of the police matron. Brother bellowing a wavering baritone is a noise highly preferable to the message, "Better come down, your boy is in trouble."

#### *A Language Understood by All*

Back in Omaha not many years ago, a little schoolgirl worked diligently at her black notes. There were times when her vocal powers were not fully appreciated. Her leisure hours were spent seeking an intimate acquaintance with music. She continued her work and her acquaintance. Recently she cleansed and elevated the souls of a large audience with an aria sung as only the most highly trained artist may sing. Down in Texas another little girl, then in the early grades of her public school, labored ponderously and with some trepidity over her black note intervals and maturities. Not so long ago she thrilled the souls of a thousand of her fellow citizens with her song. The exclusive family, "readin', writin' and

'rithmetic," wisely welcomed music into their home membership.

As we grow to manhood and womanhood new homes must come and new obligations must be made and met. The black notes of youth's music become the notes of material commerce. They must be met with the same promptness. In such homes and in such lives music is necessary. In our homes, in our schools, at our work, in our everyday life, in youth and in old age music is a solace and an inspiration to better things, better acts and better thoughts. Music thus employed is certainly a safe assurance against moral bankruptcy. It is a God given attribute. It is a language understood by all. It exposes each soul and mind to that which is beautiful, elevating and enjoyable. This is the message and the mission of music.

### Business Courses in Public Schools Fall Short of Demands

The standards of achievement in stenography must be critically overhauled to make classroom instruction and requirements correspond to the actual demands of business, J. O. Malott, specialist in commercial education, stated recently.

Teachers do not know enough about the variations of clerical work involving stenography to adjust their course in proper proportion, and in graduating the standards accordingly, he said.

Studies of measurements of achievement indicate that where individual school systems have fixed their own standards, their commercial students are not attaining them, and in a majority of reports the median achievement is below the alleged minimum standard of passing the course.

In city and state courses, the minimum number of words required per minute in typing to pass the first year course range from 20 to 45, even when allowances are made for the subtraction of penalties for errors.

The general requirements for passing the second year vary from a minimum of 35 to 60 words typed per minute, while the desired number vary from 35 to 80 words, Mr. Malott said.

One would not think offhand that collecting data on typewriting and shorthand requirements and actual student achievements is a problem for consideration, Mr. Malott stated, but when one observes the large percentage of persons who earn a living through stenography, and then has his attention called to wide variations in standards for passing, the importance of arriving at a scientific technique of teaching to meet certain universal requirements of business does present a problem, and a serious one.



# What Type of School Publicity Wins the Best Results?

*Since public taxes are the chief source of educational revenue, citizens should be kept fully informed regarding the progress and needs of the schools*

By JOSEPH H. SAUNDERS, SUPERINTENDENT OF SCHOOLS, NEWPORT NEWS, VA.

THE public school is the largest and most important social activity of the state. Upon its efficiency, development and progress depend the welfare, the prosperity and the progress of present and future generations. If the public is kept fully informed as to the progress and the needs of the schools, it will not be slow to provide the means to satisfy the needs, nor will the schools suffer from the attacks of ignorant, bigoted or designing groups.

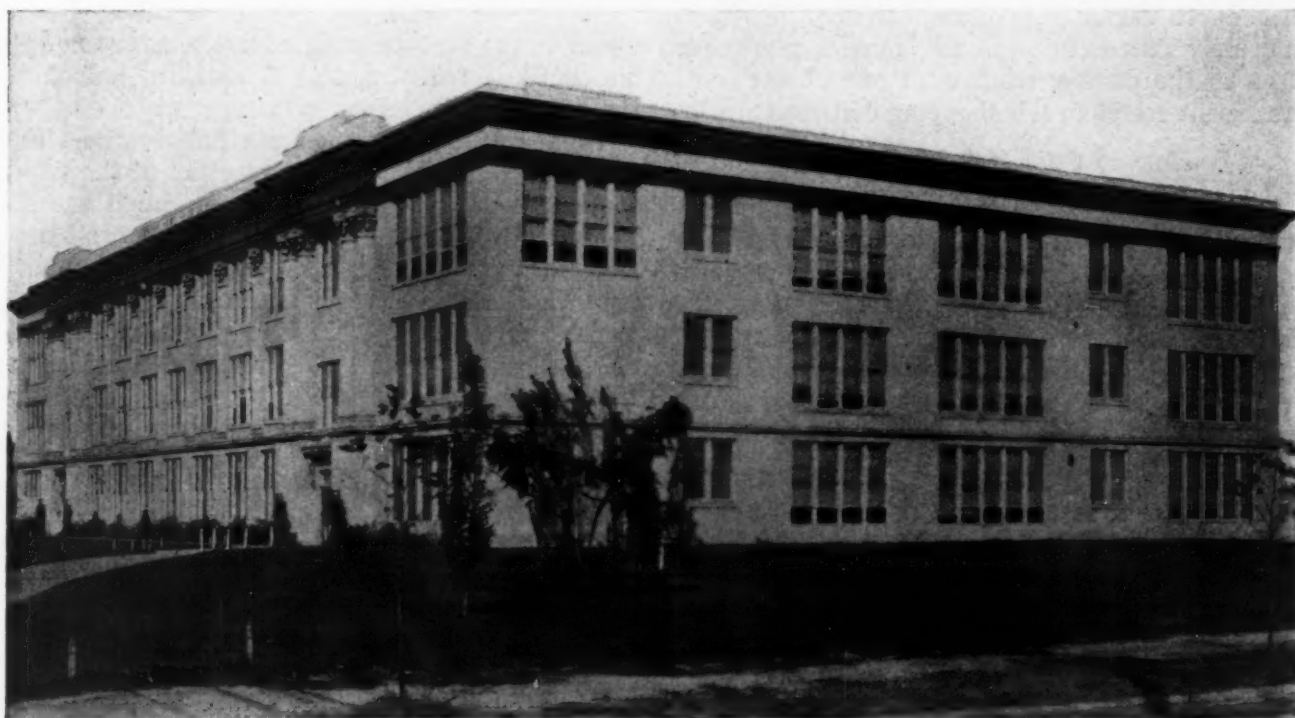
The following four general policies that schools may follow in giving facts to the public are set forth by Arthur B. Moehlman, professor of school administration and supervision, School of Education, University of Michigan, in "Public School Relations": (1) the cover-up policy; (2) the partial fact policy; (3) the policy of publishing all the facts, unorganized, and (4) the policy of publishing all of the facts, organized and interpreted.

In the cover-up policy, only the facts required

by law are published and the material given the public consists of vague generalities and attractive slogans. This policy is not followed because of any sinister desire for concealment, but because the superintendent and the board feel that the general public cannot understand the technical aspects of education and should be given only information that can be grasped easily.

With the partial fact policy facts that may excite commendation and approval are published and those that may excite unfavorable comment are suppressed. This policy may not involve dishonest methods but is adjudged by some to be the best method of securing progress. It involves dangers, however, not the least of which is the creation in the public mind of false standards of achievement. The public may be made to believe that the schools are so good that they do not need increased support.

The third policy would present all the facts



*The attractive, well kept high school at Newport News, Va., makes a constant appeal to the public.*



without organization or interpretation. In every community there are elements antagonistic to the public school program. This policy would enable those who oppose public education to sift out the faults and organize them in such a way as to harm the schools.

The fourth policy would present all the facts, so organized as to emphasize salient points. The average individual requires interpretation of technical material. The administration can interpret the facts and present the data in such a way as to substantiate its position. Since all the facts are presented no charge of concealment can be made, nor can opponents place an unjustifiable interpretation upon them.

Public taxes are the only source of revenue for the public schools and generous support for them will in great degree be the result of an intelligent understanding by the citizens of the work of the schools. Their aims, objects and results must be set forth in language understandable by all.

Agencies through which proper publicity may be given to the public include reports, bulletins, courses of study, letters to parents, school papers, newspapers, interviews, speeches, lectures, radio broadcasting, patrons' day celebrations, demonstrations, exhibits, parades and athletic contests.

Citizens, especially men, will not come to the schools so the schools must be carried to them. At Newport News we have sought to do this by all the means suggested above. An effective method of demonstrating the work of the schools has been keeping the school in session during the evening hours and inviting parents, especially fathers, to attend. Another plan that has been unusually successful was to transfer an entire class to the display window of one of the most prominent stores in the shopping district.

#### *How to Gain Helpful Publicity*

Effective administration is one of the chief factors in gaining helpful publicity. Effective administration is dependent upon the complete cooperation of school board, superintendent, supervisory staff, principals, teachers, pupils and janitors and the tax paying public. Complete cooperation depends upon intelligent understanding by these groups of the aims, objects and methods of procedure involved. Upon the superintendent, the responsible administrative head, devolves the duty of bringing adequate information in understandable form to each of the groups.

The school board is the stockholders' board of directors and as such it is the legislative body of the corporation. It is almost axiomatic to say that to function properly the board must be presented with all the facts, adequately organized and ana-

lyzed. The recommendations of the superintendent must be based upon and supported by information periodically reported to the board. The findings in these reports, with the recommendations based thereon, are usually given a prominent place in the daily papers and provide the superintendent with an effective means of publicity of the type that results in public support. Such reports must be brief, concise and easily understandable by the general public as well as by the school board. If it is necessary to present technical data in support of the conclusions reached, these should be presented in a supplementary report. A well informed school board member is an important factor in securing proper publicity.

#### *Satisfying the School's Patrons*

In any community the teaching corps comes into contact with 10 or more per cent of the adult population and hence may largely shape the opinion of this considerable group of citizens. If the administration has the confidence of the teachers, if the teachers are loyal and if they are kept informed by the administration of its aims and objectives, they become the most potent factor in promoting the program of the administration. Conversely, if the teachers lack confidence in the administration, if they lack loyalty and if they lack information, they can and usually do nullify the best laid plans of the administration. By means of bulletins, group conferences and personal interviews, the superintendent can keep his teachers informed, advised, encouraged and stimulated to the point where they will obtain satisfactory results with the pupils. A satisfied customer is the best possible advertisement for any mercantile establishment. A satisfied patron is the best publicity exponent of any school system.

The pupil is the connecting link between the school and the patron. The reaction of the pupil to the school, the information the pupil carries home, and the effect of these upon the parent constitute important factors in the scheme of publicity. Good school management, proper classification of pupils, and a curriculum adapted to the needs of the community, with special attention to individual needs, are items which, properly handled, will establish in the minds of pupils and parents the social value and the necessity of a modern program of public education. Such a program carries its own appeal, but this appeal may be emphasized by means of the school paper, school plays, school exhibits and school demonstrations.

The curriculum, properly administered, may be made a vehicle of publicity, especially in such subjects as civics, social science, hygiene, mathematics and the vocational arts.

Another feature of administrative control that may be made an important factor in school publicity is the schoolhouse. A schoolhouse properly planned, well kept, with attractive grounds and shrubbery makes a constant and permanent appeal to the community. In Newport News the high school is one of the city's most imposing buildings. Many of those who opposed the bond issue for its erection now point to it with pride. In this section of the state we still retain the itinerant system for Methodist ministers. Recently one of these ministers was transferred to Newport News from a neighboring city. His son was transferred to our high school. After a few days in the school the boy reported to his father, "This is the cleanest and best kept school I ever attended. The principal, the teachers, the janitors and the pupils all take pride in keeping it so." The following Sunday the minister preached a sermon based upon the son's statement. This was valuable publicity.

Through effective administration the school system may be made to minister to the community so that it becomes its own best form of publicity. Our task, however, seems difficult. In all other forms of human endeavor, additional capital is provided before increased efficiency is expected, but in our work we must show increased efficiency before additional support is given.

### Vanity Is Called Greatest Obstacle to Paper Bound Books

Public vanity in the United States is the greatest obstacle to the introduction of paper bound books and cheap books generally, the commissioner of education, Dr. William John Cooper, declared orally recently in connection with the movement launched by a group of New York publishers to market cheaper books.

The American people have shown a distaste for paper bound books, and in so doing have encouraged a more costly type of publication, Doctor Cooper said. When they have been taught that this is vanity and that a considerable part of the expense attached to the book is in its binding then there is some hope for cheaper books in the country, he said. Persons who put half of the price of a book in the binding, generally speaking, will buy half the number of books that others will buy who are not greatly concerned about the binding.

Doctor Cooper said that he personally endorsed the movement for cheaper books and wanted to see more paper bound books in the United States. He called attention to the large number of cheap

paper bound books found in Europe compared with the scanty number in the United States.

In reference to the possible losses to the author by a reduction in price of books, Doctor Cooper said he would not express an opinion other than to say he believed that adjustments could be made, especially with wider sales in mind.

### What Are the Trends in the Hiring of Beginning Teachers?

H. M. Whisler, director of teacher training for Indiana, recently requested from thirty-three colleges, universities, and special schools in Indiana the number of their last year's graduates eligible for elementary and secondary teaching but unemployed as teachers, says the *Indiana Education News*. In the elementary field the prepared but unemployed were as follows: primary, 10; intermediate-grammar grade, 16; music, 1; art, 5; a total of 32. In the secondary field a tabulation of unemployed, eligible graduates by major subjects, shows:

	Number	Per Cent
English .....	118	36.5
Social studies .....	57	17.6
Science .....	39	12.1
French .....	23	7.1
Mathematics .....	21	6.5
Home economics .....	17	5.3
Physical education .....	15	4.6
Latin .....	12	3.7
Music .....	9	2.8
Art .....	8	2.5
Commerce .....	3	0.9
Industrial arts .....	1	0.3
Spanish .....	..	0.0
German .....	..	0.0
Total .....	323	99.9

That is, 118 graduates prepared to teach English were not teaching on March 1, 1930. These 118 constituted 36.5 per cent of the total group of prepared but unemployed graduates. Other subjects of lower percentages are: social studies, 17.6, science, 12.1, down to Spanish and German which registered complete employment. English and social studies alone cover more than half the field of unemployment in secondary schools.

In drawing conclusions from these data, it must be borne in mind that the fields of English, social studies and science employ more teachers than other fields, and their percentage of unemployed as related to total membership is not indicated. The study does seem to indicate, however, that those training in Spanish, German, commerce, industrial arts, music and art are fairly sure of a position.

## The NATION'S SCHOOLS

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## Editorials

### The Supervisor—the Key to Efficient Instruction

ONCE we were accustomed to think that if a candidate for teaching was required to spend a year or two in a normal school of a teachers' college or to complete fifteen hours of professional work in a university, she would be adequately prepared to go into a classroom and do acceptable work both in instruction and in discipline.

We do not entertain this notion any longer. Experience has shown that there is no way known to man by which a teacher can be made ready to do expert work in a classroom until she is face to face with the problems that are presented in the classroom. In the normal school, the teachers' college and the university, she can be started in efficient teaching but she cannot be perfected in it. There is no difference of opinion regarding this matter now among those who train teachers on the one side and who supervise them or score them in actual service on the other side.

Recognition of the fact that a teacher needs help after she begins teaching is now being manifested throughout the country. The Eighth Year Book of the Department of Superintendence reflects the widespread belief that a teacher cannot or at least ought not be left to her own devices when she emerges from a teachers' college or a university and enters upon actual teaching. The contents of the Eighth Year Book are illuminating. They show that the supervisor is the key to efficient instruction. The supervisor can nurture a teacher's instructional ability or he can kill it. He can be a headsman or he can be a guide and counselor. He can be merely an inspector or he can himself be a teacher. He can play the most important rôle in determining whether or not there will be a wholesome and healthy professional sentiment among the teachers whom he visits. He can cause teachers to be happy in their work or to be miserable in it.

One thing can be asserted without qualification—a supervisor, whether he be a specialist, a principal or a superintendent, who inspires terror or lack of confidence in his teachers hurts them rather than helps them. If his visits are dreaded, if he acts on the supposition that his function is to find fault and to condemn rather than to praise



and offer constructive, helpful suggestions, he will injure rather than improve the educational work of his community. Traditionally, one who supervises the work of teachers must assume that they are deficient and delinquent and that the way to help them is to cut them with sarcasm or satire. Traditionally, the one who supervises teachers must assume that he is superior to them; he must pose as an expert; he must manifest his authority by laying down the law without regard to the teacher's reasons for her procedure. The first step to take in making supervision helpful is to get rid of the traditional attitude of the supervisor toward his supervisees. The fact that the traditional attitude of the supervisor has disappeared completely from progressive educational systems, with entirely beneficial results, is evidence that it can be and ought to be abandoned everywhere.

The NATION'S SCHOOLS is now giving and will continue to give much attention to improvement of supervision as the key to efficient instruction in schools of every kind and grade and quality.

### Education for Protection

**A** WHILE ago a superintendent of schools in a small city in Iowa sent in to The NATION'S SCHOOLS a number of copies of a monthly magazine which he said was circulating quite extensively in the locality in which he lived, especially in rural districts. He was agitated and depressed because he believed the magazine was doing harm in his community, and he thought it ought to be possible for the schools to counteract the influence of such publications.

An examination of the magazine showed that it was—and is—designed principally to exploit credulous people. It is filled with advertisements of patent medicines, home occupations, cheap articles of dress and adornment and household furnishings. An examination of reputable magazines revealed the fact that they did not include any of the advertisements appearing in this publication.

There are a few cheap—very cheap—sensational stories in this vulturous magazine. Fortunately they are printed in such small type and the printing is so badly done that it can hardly be read, although doubtless many victims attempt to read it, with disastrous results to their eyes. The editorial matter occupies only a small fraction of the total space in the magazine. The largest amount of space given to any one line of goods is devoted to patent medicines. Advertisers describe the symptoms of all kinds of diseases. And then having created apprehension in the minds of their subjects, they tell them that the only way

they can prevent a serious illness is to purchase a large quantity of their nostrums.

Are there no laws to prevent the exploitation of people in this way? The personal and domestic articles advertised in these pages are not worth the stamp required to send an order for them. But the school superintendent referred to says that innocent persons are being duped.

A large group of university students whose homes are in different sections of the country were asked recently whether they have any knowledge of the extent to which such articles as are advertised in this magazine are purchased by people in rural or urban communities, and their answers showed that apparently a considerable number of persons are patronizing the establishments that advertise in the magazine. Professor Weeks of North Dakota conducted a statewide investigation a short time ago in order to find out to what extent people were buying patent medicines through advertisements, and he was amazed to find that a surprisingly large number were spending their money for cure-alls advertised in the cheap publications.

Would it be feasible to discuss these matters with pupils in rural and perhaps in urban schools with a view to safeguarding the young from exploitation by conscienceless manufacturers of worthless and even harmful articles? It would certainly not be an impossible task to instruct the young so that they would not be lured by patent medicine advertisements to swallow concoctions that can only do them harm. Evidently the laws cannot protect people from exploitation, and the schools will have to make them self-protective. We now have education for culture, education for discipline, education for a vocation and education for leisure. Let us add one more type of education—education for protection, which is needed as much as other types of education.

### Mouth Health and Its Importance in Education

**S**UPERINTENDENT Willis A. Sutton, Atlanta, one of the advisory editors of The NATION'S SCHOOLS, and newly elected president of the National Education Association, made the statement at the first conference of the Mouth Health Association of America in Rochester, Minn., that he had reduced the failures in his school system 20 per cent by giving dental treatment and mouth health training to school children. If the mental work of pupils can be improved one-fifth by attention to their teeth, tonsils and adenoids, then the matter should be of vital concern to all educational people. For-

tunately, it is not difficult for a specialist to remedy mouth disorders that interfere with intellectual accomplishment.

Apparently a child whose teeth and tonsils are foci of infection is not in a condition to gain profit from the instruction offered in the schools. When toxins bred in the mouth are circulating in the blood stream, the brain seems to be unfavorably affected and mental processes are slowed down. Statements to this effect were frequently made at the Rochester conference. One speaker asserted that the mental ability of children in a certain school system had been improved practically a hundred per cent as a result of a campaign for improved mouth hygiene. Absence from school is traceable in considerable measure to unhygienic conditions in the mouth, according to investigators. More than half of all the children examined in the schools have been found to have unhygienic mouth conditions. The statement was made at the Rochester conference that out of 3,000 students examined at the University of California, only ten had perfect mouth conditions.

Following the discussions and deliberations at the Rochester conference, there is getting under way a nationwide movement designed to give special attention to the mouth health of every school child. Educational people will certainly cooperate most heartily in any and every plan designed to improve the physical condition of school children to the end that pupils may gain greater benefit from the work of the school, and also that they may get more out of life for themselves.

### What Rôle Should Be Played by Extra-Curricular Activities?

EVERYONE seems to be talking these days and many people are writing about the eagerness of high school and college students to sacrifice their studies for all kinds of irrelevant and noneducational enterprises, such as managing athletic teams, running school and college publications and directing dances.

During the past few months several surveys of extra-curricular activities have been made in universities and high schools and it appears that many students devote a considerably larger proportion of their time and energy to these activities than they do to their work in classroom or laboratory. The morning papers report that one college president, glancing over the results of these surveys, declares that our secondary and higher institutions are all going to seed because of the prominence that is being given to useless, distracting work.

No one familiar with the situation can doubt

that extra-curricular activities are playing an increasingly important and prominent part in secondary and higher institutions. The *via media* to distinction in a large percentage of high schools and colleges lies not in the direction of the classroom and the laboratory but rather in the direction of football, basket ball, baseball, rowing, swimming, wrestling, vaulting, running, shooting with bow and arrow and managing promenades and all kinds of class functions.

Why are young people in high school or college more eager to be active and efficient outside than inside the classroom and the laboratory? Partly because we live in an age when executive ability is regarded more highly than scholarship. A scholarly student was formerly looked up to, pointed to with admiration, marked for distinction, decorated with Greek letter symbols and keys. The latter practice still continues, but student bodies as a whole are not much impressed by such decorations. An "H" or a "Y" or an "M" or a "W" denotes much higher merit in the eyes of a student body than does a Phi Beta Kappa key or any symbol of scholarly attainment. The world outside of college walls honors ability of a managerial or social or athletic character much more than it does mental or at least academic ability. The chambers of commerce, the Kiwanis, Rotary and Lions clubs give dinners for letter men or promenade queens or kings, whereas they never give any attention at all to the Phi Beta Kappa students. Inevitably, then, students are going to be influenced by popular opinion regarding the things considered of chief importance in high school and college life.

There is another reason why extra-curricular activities play a dominant rôle in secondary and higher institutions. When students have gone on for ten or twelve years assimilating more or less static knowledge, they crave an opportunity to do something dynamic. If we knew how—we are studying the problem diligently—to combine the assimilation of knowledge with its application or utilization in daily life, and if students were active as much as they are assimilative in classroom and laboratory, their craving for dynamic life would be largely gratified in the pursuit of educational work and irrelevant outside activities would not be so seductive as they are now. As a matter of fact, this can be observed at this moment in a few institutions in our country in which students spend a considerable part of their time in learning by doing or at least by applying what they are learning in actual, concrete activities.

It seems unnatural and abnormal to require a person to continue for twelve or sixteen years learning in a mnemonic way material that is more or less remote from situations in daily life.



# Recent Measures That Have Lowered the Cost of Fire Protection

*Changes made by the National Fire Protection Association in the regulations governing the installation of automatic sprinklers have resulted in a 20 to 30 per cent reduction in the cost of safeguarding schools from fire*

BY VINCENT R. BLISS, CHICAGO

**A**S THE result of an important modification of the regulations governing the installation of automatic sprinkler equipments made by the National Fire Protection Association at its annual meeting in May, the cost of sprinkler protection in school buildings has been reduced from 20 to 30 per cent.

By this action, a Class B standard of sprinkler equipments is established for "light hazard" occupancies, such as schools, colleges, dormitories, libraries, museums, hospitals and hotels, when it is felt that some modification is permissible in the standard requirements heretofore applied uniformly for these occupancies and for mercantile and industrial occupancies. The Class B standards provide for a wider spacing of heads, smaller pipe sizes and less stringent requirements for water supply.

The effect of this important and urgently needed change in sprinkler regulations is of vast significance. It will not only permit the installation of sprinkler protection in many educational

buildings that have heretofore been unable to afford this safeguard, but it will also influence to some extent the future design of school buildings of all types.

E. P. Boone, chairman of the committee that formulated the revised regulations adopted by the National Fire Protection Association, made the following statement regarding the purpose and results of the change:

"In the early days of the development of automatic sprinkler equipments, all thought was centered upon the hazards present in factories, warehouses and other commercial and industrial establishments where a considerable fire hazard existed and where the value of the property to be protected was relatively high. All existing regulations were designed to combat these hazards and to offer the fullest possible protection to both life and property that science and experience could devise.

"Within recent years, there has come a realization that many classes of occupancy offer consid-

HOW THE SIZE OF ROOMS AFFECTS THE NUMBER OF SPRINKLER HEADS WITH CLASS A AND CLASS B SYSTEMS\*

Size of Room		Number of Heads Required		Saving	
Width	Length	Class A System	Class B System	No.	Per Cent
Under 10'	Between 10 and 14'	2	1	1	50
Between 10 and 14'	" 14 and 20'	4	2	2	50
" 14 and 20'	" 20 and 28'	6	4	2	33
" 20 and 28'	" 28 and 30'	9	6	3	33
" 28 and 30'	" 30 and 40'	12	9	3	25
" 30 and 40'	" 40 and 42'	20	9	11	55
" 40 and 42'	" 42 and 50'	25	12	13	52
" 42 and 50'	" 50 and 56'	30	16	14	46
" 50 and 56'	" 56 and 60'	36	20	16	44

Average Saving 43.11

\* There are certain combinations of dimensions and certain room sizes that permit of no reduction in the number of sprinkler heads under Class B regulations, and these reduce the average savings to from 20 to 30 per cent. For example, bathrooms, closets and all other areas less than 10 feet square require one head under either system. Also dimensions over 14 feet and under 20 feet, over 28 feet and under 30 feet, would require the same number of heads within the span indicated.



erably less fire hazard than the occupancies for the protection of which automatic sprinklers were originally intended, and a movement was ultimately instituted to recognize these light hazard occupancies by making amendments and revisions to the established regulations. It was further recognized that the cost of Class A installations prevented the installation of sprinkler equipments in many thousands of buildings that urgently needed protection. The purpose of the committee in formulating and sponsoring the new regulations was to lower the cost of sprinkler protection in buildings having light hazard occupancies without in any manner diminishing the adequacy of the protection afforded by approved equipment."

#### *Savings to Result Under New System*

It was recently stated by the chief engineer of a manufacturing company that savings ranging from 20 to 30 per cent will result from the adoption of Class B standards in place of the Class A standards heretofore required in schools. "Development of the Class B standard of automatic equipment will undoubtedly reduce very materially the cost of installing sprinklers in typical school buildings," he said. "As an illustration of this, I have carefully checked over a large number of actual buildings and have laid them out in accordance with both the old standard and the new Class B standard. Floor plans of the first story of a girls' vocational school in New England laid out with both systems show that under the standard system (Class A), 133 sprinkler heads are required. Under the new regulations (Class B), only 94 heads are required.

"The material cost per sprinkler increases slightly so far as the sprinkler work itself is concerned and decreases slightly for the auxiliary work, such as alarm valves, so that the material cost per sprinkler under the Class B system will be about the same as the material cost per sprinkler under the former standard system. The labor on Class B installations will be slightly more than the labor on the standard system, but the difference will be small.

"A careful estimate of this particular job indicates a saving in cost, and, of course, in selling price, of approximately 30 per cent. This is primarily the result of eliminating a large number of sprinklers under the Class B ruling. In the case in point, the water supply comes from a city connection. If, however, there had to be a separate water supply, this, too, would have cost a great deal less. It is reasonable to assume, therefore, that a saving to the consumer of from 20 to 30 per cent over the standard system will be effected in many cases."

Naturally, the permitted spacing of sprinkler heads under the new regulations is influenced by the type of construction. In mill construction, in which all of the wood framework is of heavy timber, the maximum spacing is 14 feet apart in any bay not over 14 feet wide. In semi-mill construction, in which heavy timbers are used for the major framework and somewhat lighter timbers for secondary members, the sprinklers may be spaced not more than 12 or 14 feet apart. In joist construction, the Class B regulations apply only if the ceilings are sheathed or plastered. No modification of spacing is permitted with open joists. Under smooth finish, wood joisted ceilings plastered with gypsum board, cement or metal, sprinklers may be spaced, without staggering, not more than 14 feet apart in all bays up to 14 feet wide, except in basements sheathed with materials other than cement or gypsum plaster on expanded metal or metal lath, where no modification of spacing is permitted. If the sheathing is combustible, such as matched boarding or fibre board, the maximum spacing is 12 feet apart in bays up to 12 feet wide.

In fire-resistive construction, sprinklers may be spaced not more than 14 feet apart under flat-slab floors. Under panel construction, the same spacing is permitted, but the lines preferably should be staggered.

The maximum pipe size required in distribution lines is 2½ inches when the water pressure is sufficient to maintain 20 pounds residual pressure at the top of the riser with 250 pounds per minute flowing at the top of the riser. These smaller pipe sizes facilitate the concealment of pipes in walls and under plastered ceilings so that in normal installations, only the sprinkler heads need be visible.

#### *Room Size Affects Number of Sprinklers*

Considerable significance attaches to the dimensions of classrooms, corridors and other areas in school buildings. This is partly explained in the accompanying table, which indicates how the sizes of rooms affect the number of sprinkler heads under the two systems. Main corridors in large school buildings which exceed 10 feet in width would require two lines of sprinklers under Class A standards, but if the corridors were not more than 14 feet in width, one line would be sufficient under the new Class B regulations. Corridors with dimensions between 14 and 20 feet would show no economy in a Class B layout, because two lines of heads would be required.

Another critical dimension lies between 28 and 30 feet. Under Class B regulations, two sprinkler heads would serve a 28-foot span, but three would

be required for a dimension exceeding 28 feet. Under certain circumstances, three lines of heads would be sufficient in a Class A installation if the dimension did not exceed 30 feet, because a 10-foot spacing is often permitted under the higher standard. These critical dimensions are of sufficient importance to influence somewhat the future design of new school buildings, because the reduction in the number of sprinkler heads under Class B regulations may range from zero to as high as 55 per cent by variations in dimensions as small as 2 feet in some cases. Undoubtedly with careful planning, new buildings can be fully protected with automatic sprinklers at savings in excess of 30 per cent of the former cost.

#### *Advantages of the New Standards*

Insurance savings are perhaps of less importance in the majority of school structures than in other classes of occupancies to which Class B regulations apply. No definite rulings have yet been made by the important insurance organizations, but those authorities consulted on the subject are unanimous in their opinions that sprinkler installations in approved occupancies under Class B standards will be granted the same reduced rate that has heretofore been granted for Class A systems.

Some experts feel that there will be a tendency toward the use of low temperature heads with Class B installations, because these heads operate at 135° F., giving quicker response than the standard 160 degree solder type heads. The low temperature head of the quartz bulb type, which is absolutely resistant to corrosion, is particularly recommended because of the extra protection it affords.

There should be no need to present arguments in favor of sprinkler protection in the thousands of school buildings now standing in this country and in the many other thousands yet to be built which cannot afford the cost of full fireproof construction. Even in the latter buildings, sprinkler protection is of inestimable value in diminishing panic or the loss of life through shock or suffocation. A deluge of cold water is most effective in quieting panic and, at the same time, it tends to resuscitate quickly children who have fainted from fright or have been slightly overcome by smoke. Protection of life is vastly more important than the protection of property.

School authorities desiring further data on the application of Class B standard installations in buildings within their charge can obtain reliable cost estimates from the representatives of leading sprinkler companies and estimates of insurance savings from their insurance agents.

## New Booklet on School and College Athletics

Bulletin 24 of the Carnegie Foundation for the Advancement of Teaching, "The Literature of American School and College Athletics," prepared by W. Carson Ryan, Jr., is now available. More than 300 pages are devoted to a carefully annotated treatment of current and standard literature in the field of school athletics.

The table of contents shows the following analysis: (1) Athletics as Educational Philosophy, Values, Purposes; Relation of Physical Education; (2) History of Athletics; (3) The Athletic Controversy: Charges, Defense, Reform Suggestions; (4) Administration, Organization, Finance; (5) Scholarship and Athletics; (6) Health of Athletes; (7) Athletics for All; Mass Athletics; Intra-Mural Athletics; (8) Coaches and Coaching; (9) School Athletics; High School, Private Secondary School; Junior High School, Elementary School; (10) Athletics for Girls and Women; (11) Sportsmanship; (12) Separate Games and Sports; (13) Psychology and Research; Tests and Measurements; (14) Bibliographies; Source Books; (15) Current Journals. The bulletin is exhaustive in treatment and is invaluable as an expert guide for athletic directors.

## A New Report Card That Records Other Things Than Grades

A quarterly report card that acquaints parents with their children's progress in social relationships, self-expression, critical thinking, worth while activities, knowledge and skills and health is in use in the grade schools of Hamburg, N. Y., says the *Survey*. The teacher's rating is expressed by letters: A means superior; B, above average; C, average; D, below average; E, undesirable. Supplementing this card is a monthly report to the parents on the child's progress.

"The quarterly report," says Frederick James Moffitt, superintendent of the Hamburg schools, "is an attempt on our part to give definite recognition to the values we hope to stress as objectives of our elementary school." These objectives are printed on the back of the report card as follows:

To help the child (1) understand and practice desirable social relationships; (2) discover and develop his own desirable individual aptitudes; (3) cultivate the habit of critical thinking; (4) appreciate and desire worth while activities; (5) gain command of the common integrating knowledge and skills; (6) develop a sound body and normal mental attitudes.



## Practical School Administration: Safeguarding Pupils by Reducing the Fire Hazard

BY PHILIP LOVEJOY, ASSISTANT SUPERINTENDENT OF SCHOOLS, HAMTRAMCK, MICH.

A NEW junior high school building is soon to be built in Hamtramck, Mich. The structure will house more than 2,400 children and will cost about \$800,000.<sup>1</sup>

The superintendent of schools, with the help of the educational consultant, has prepared the educational plan. This has been submitted to the architects for detailed layouts and specifications. Before the final specifications are written, the layouts and proposed specifications will be submitted to the Michigan Inspection Bureau, a branch of the Western Actuarial Company of Chicago, so that a complete analysis of the fire hazard may be made. Correctly constructed buildings not only save the board of education money in insurance premiums, but they safeguard something else far more precious, the lives of the children they house.

The inspection bureau, as an agent of insurance companies, inspects and, in accordance with well defined schedules, sets the basic insurance rate on the type of structure that has been erected. Several angles of this matter must be considered. In the first place, no architect will willfully specify any type of construction or appliance that is not in accordance with local codes. In Michigan, this building must finally be approved by the state department of public instruction before it can be erected. The building, however, may pass the inspection of both of these agencies and yet be relatively a fire hazard. In other words, the codes are rather a minimum to be observed than a maximum for protection.

### *What the Inspection Revealed*

We have recently requested the inspection bureau to reinspect each of the school buildings in Hamtramck. We find that several buildings have automatically received lower ratings than formerly because of changed conditions in risks pertaining to school buildings. The final report from the bureau indicates, however, that still greater reductions could be made in the basic rates if certain additional alterations were made at this time.

A study of these alterations indicates that many of them are too expensive to be made at

the present time. If they had been made when the building was being erected they could have been included without much extra cost. The point is that the buildings did pass the local code and they did receive the approval of the state department, but they did not receive the lowest insurance rating because of certain minor difficulties.

### *Protecting Pupils' Lives*

Now the important thing is not that these changes would have caused a lower basic insurance rating as much as it is that there are certain hazards extant that prevent the local buildings from being as safe as they might be, and safety means just one thing—the consideration of the lives of the human beings who daily must enter the building. In every case, of course, where these changes can be made by the board of education without too great an expense, they will now be made. When the details are minor in safety, it may be necessary to use much greater care in choosing watchmen and in practicing fire drills. At this time many of these minor items would be too costly to include and their cost would not be offset by the reduction in the insurance premium. If the school authorities are reasonably careful the lives of the children will not be endangered.

Nevertheless, if the board of education wants a building that is one hundred per cent safe, or as safe as it is possible to make a building, it will have some index to that factor by the rating it receives from the inspection bureau. There will always exist some hazards, but if these are reduced to a minimum it will mean that every care has been taken to make the building safe for its occupants. For instance, a woodshop is a "direct charge" in the inspection which tends to increase the rating. Since woodworking must be taught in schools, there will be a charge for that occupancy, but there are aspects of the shop that can be changed to reduce to a minimum the hazard of woodworking. For instance, gasoline is used with the finishes that are applied to the wood. There will be a certain "occupancy" charge for the use of gasoline, but if it is kept in containers holding less than one gallon, which have the approval of the underwriters' laboratory, the rating will be

<sup>1</sup>The site and equipment will add \$300,000 more.



*Atright: A quiet, comfortable floor of Sealex Battleship Linoleum in the Law Library of the University of Arizona, installed by McLaughlin Furniture Co., Tucson, Arizona, Authorized Contractor of Bonded Floors.*

*Below: The splendidly equipped Law Building of the University of Arizona. Architect: Roy Place.*



## BONDED FLOORS

*Bonded Floors are floors of Sealex Linoleum and Sealex Treadlite Tile, backed by a Guaranty Bond issued by the U. S. Fidelity and Guaranty Company. Authorized Contractors of Bonded Floors are located in principal cities.*

# QUIETNESS costs no more

**T**HE University of Arizona has paid no premium for quietness in the library of its model Law Building. The floor material, *Sealex Battleship Linoleum*, is quiet by nature. It subdues the clatter of footsteps. Yet it costs no more (often costs less) than the hard, noise-promoting floors it supersedes.

When you build—or when you remodel—investigate the advantages and costs of using Bonded Floors of *Sealex* material. Ask us for an estimate. You'll be pleased with the reasonableness of the figure.

*Sealex Battleship Linoleum* is a splendid "heavy-duty" floor at low cost. Where a more decorative effect is desired, *Sealex Jaspé Linoleum* is far from expensive. In reception rooms, entrance halls, private rooms, etc., the cost of *Sealex Treadlite Tile* in made-to-order designs is not at all prohibitive. All are easy-to-clean, quiet and comfortable underfoot. And when installed by Authorized Contractors of Bonded Floors, they carry our Guaranty Bond.

CONGOLEUM-NAIRN INC. • General Office: Kearny, N. J.

less and the hazard reduced. The insurance premium is less which means that the board has accomplished a stroke of good business in reducing its hazard, whether it carries its own insurance or buys it commercially. But another feature is far more important. The fire hazard has been so reduced that the lives of the boys who are studying woodworking are sure to be protected from fire accidents.

It is for this reason that the plans of the new

INSURANCE SCHEDULE, HAMTRAMCK PUBLIC SCHOOLS, JANUARY 15, 1930

Schools	Building Rates		Contents Rates	
	Old	New	Old	New
Carpenter ..	.69	.69	1.05	1.05
Dickinson ..	.34	.233	.59	.466
1a 2A ....	.20		.45	
Holbrook ...	.41	.150	.84	.372
1a 1A ....				
Kosciuszko .	.175	.174	.435	.407
1a-9a-2A .				
Playfair ....	.244	.327	.489	.555
1a 3A ....				
Pulaski ....	.193	.182	.473	.418
1a-9a-2A .		.230		.430
Junior High.	.37	.262	.78	.495
1a-3a-9a-2A				
Senior High.	.201	.416	.498	.661
1a-9a-3A				
Films ....				(1.916)
Booth ....				(1.916)
Vocational .	.74	.553	1.10	.762
Total ....	3.293	3.011	6.180	5.192

junior high school in Hamtramck will be submitted to this inspection bureau before the final specifications are written. Certain minor recommendations will be made and these adopted so that the safest possible building will be erected.

It has been the policy of the Hamtramck Board of Education to ask the inspection bureau for a rerating at least every five years. Changes in rulings make this inspection valuable. For instance, after the last rerating a comparison of rates was made. This is illustrated in the accompanying table.

Such a table becomes of value if it is studied. Otherwise it is useless. The Carpenter School is about to be abandoned and was not included in the rerating.

The Dickinson School consists of two sections. The rate on one section was lowered and on the other it was raised for the following reason: Certain equipment was stored in a basement passageway between the two sections. Although it is not for the use of the pupils, its removal would lower the rate.

The rate on the Holbrook building was greatly reduced. This was because it had been entirely rehabilitated. Insurance of \$40,000 was formerly carried on the building and \$5,000 on the contents. After the remodeling, this was raised to \$120,000 and \$10,000 respectively and there was a refund of \$125 from the previous premium payment.

The rate on the Kosciuszko School showed a slight reduction. It could have been reduced further if the following additional changes had been made: all ventilators in walls, roof, etc., properly screened with a not larger than 1/4-inch heavy wire mesh; the motion picture booth changed to conform to inspection bureau standards.

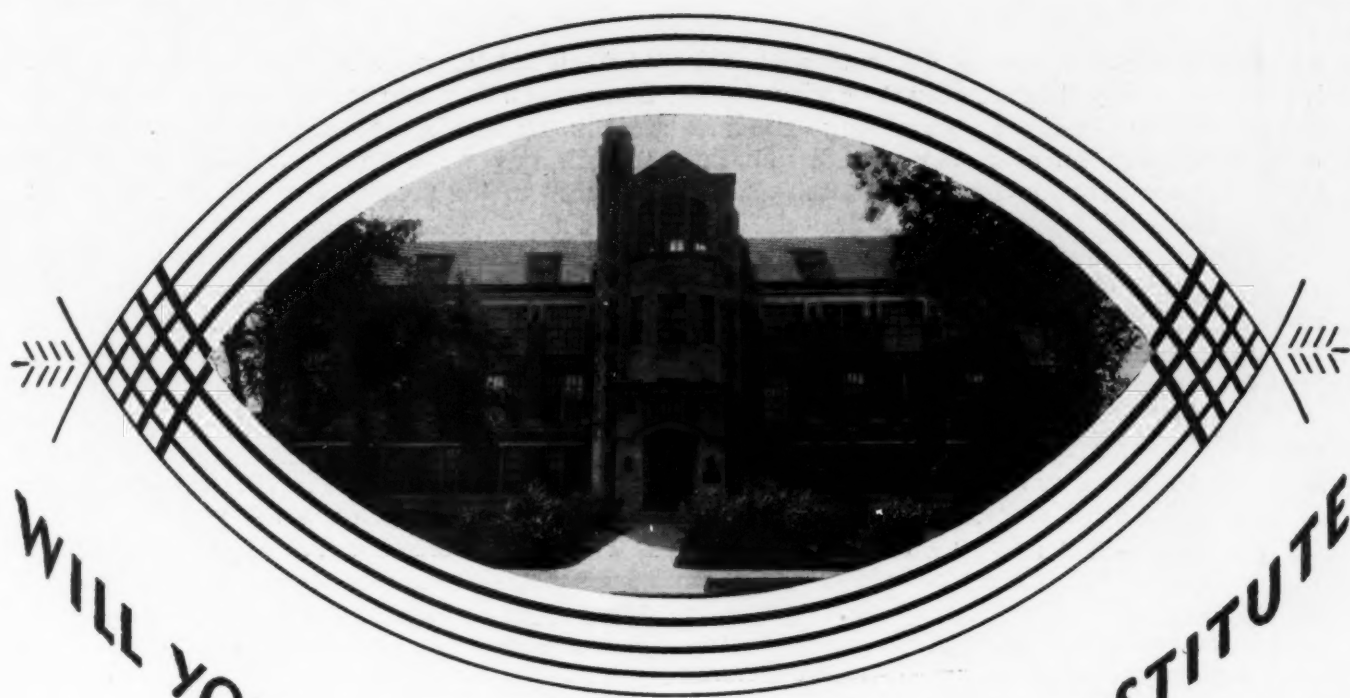
#### Needed Alterations

The rate on the Playfair School showed a marked increase in the rate. A careful study of the cause brought to light the following things as necessary: all ventilators in walls, roof, etc., properly screened with a not larger than 1/4-inch heavy wire mesh; underwriters' laboratories labeled gasoline safety cans provided, these not to exceed one-gallon capacity each; oil storage limited to not more than five drums or an approved oil storage room provided in which to store all oil in excess of five drums; all combustible material removed that it is possible to remove.

The Pulaski School consisted of two sections and the same general conditions prevailed here as at the Dickinson School.

The junior high school showed a reduction rate that was gratifying, but all that was saved here was more than lost at the high school. It is noticed that the rate here was doubled. This was given most serious study. Here are some of the necessary alterations: all ventilators in walls, roof, etc., screened with a not larger than 1/4-inch heavy wire mesh; motion picture booth changed to conform to inspection bureau standards; all gasoline removed from building and its storage and use discontinued; all wiring made to conform to the national electrical code; the garage building on Wyandotte Avenue removed so it will be not less than ten feet from all parts of the high school, provided the size of the garage is not increased; the frame portable at 2340 Wyandotte Avenue and the frame storage building, 2380 Wyandotte Avenue, either removed or moved so as to be not less than forty feet from all parts of the high school building.

The Vocational School received a considerable reduction in its rate, but it could have been reduced a great deal more if the following things had been done: all ventilators in walls, roof, etc.,



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properly screened with a not larger than 1/4-inch heavy wire mesh; all openings in floor above basement cemented and a self-closing one-inch matched lumber, tin clad door provided on the stair that opens to the basement; a self-closing one-inch matched lumber, tin clad drop door installed on the opening to the roof space; the frame portable at 2320 Wyandotte Avenue moved so that it is less than forty feet from all parts of the vocational school; all gasoline storage removed to an approved and properly buried tank outside of the building. Such small quantities as are in actual use in the building must be contained in one-gallon or less capacity underwriters' laboratories labeled safety cans, and the total amount used in the process must be limited to not over one gallon. The main storage tank to be buried outside should be installed according to the underwriters' standards. If it is desired to have a pump in the basement the tank will have to be buried with its top at least as deep as the basement floor and an underwriters' laboratories labeled pump for "Discharge of Hazardous Liquids Inside of Building," installed.

Throughout the entire system there was a reduction from 3.293 to 3.011 in the building gross rate with a corresponding reduction for the contents.

A final appraisal showed that the board should be ahead about \$100 at the present time. With further changes it will receive still greater premium returns.

Whether there is commercial insurance or board of education coverage it would seem entirely feasible to have this rerating done periodically so that a complete study of the school plant might be ascertained. At any rate, it is absolutely essential for each new building's plans to be submitted to the inspection bureau before bids are let. The ultimate saving in cash and lives may be more than worth the slight effort.

### Virginia's Itinerant Teacher and What "Teacher Load" Means to Him

In the mountain counties of Virginia, "teacher load" has come to have a different meaning from that given to it elsewhere. For in these counties, one teacher—frequently called "itinerant"—often conducts as many as four different schools in as many different communities, says the *Virginia Journal of Education*. During the past year, twelve schools in the counties of Grayson, Louisa and Montgomery have operated on this basis.

As an instance of what the itinerant teacher is doing, the *Journal* tells the story of the activities

of Allen B. Stanger in Montgomery County. Mr. Stanger conducts two schools six miles apart. He teaches school six days of the week and on the seventh day he conducts Sunday school and preaches to the people of those remote valleys. Last Fall, Mr. Stanger opened a school in a shack built forty-seven years ago. The shack is twelve miles from a main highway. It stands in a narrow valley fifteen miles long. The school opened with seventeen pupils. The school continued on a full-time basis for three months until the pupils learned certain essentials necessary for self-directed study. After this the school was in session only on Saturday, while Mr. Stanger taught five days in another part of the valley.

The most interesting fact of this experiment, says the article, is that there was practically a hundred per cent attendance with the assignments perfectly prepared each Saturday.

### Saturday Schools in the Wise Use of Leisure

W. A. Wirt, superintendent of schools, Gary, Ind., in speaking recently on the relationship of the school to the wise use of leisure time, told of the operation of the Saturday school plan in this city. Schools are kept open and in charge of a minimum number of teachers. Pupils come voluntarily and work upon what they choose, the only restriction being that their movements from one subject class or room to another must take place at the close of hourly periods. The month of March, 1930, with five Saturdays showed 165,493 pupil hours, with a teaching cost of \$5,104.92 and a per pupil hour cost of \$0.0308. The plan has been in operation for a number of years and shows well established popularity.

Superintendent Wirt is convinced that the sum of \$24,148.80 spent on 907,279 pupil hours at an average of 2 2/3 cents per pupil hour from September to March, 1929-30, constitutes an invaluable economic investment in the prevention of school failure and juvenile delinquency. He stated that the city of Gary with its \$6,137.56 net assessed valuation per enumerated child is not a particularly wealthy corporation and believes the Saturday school quite feasible in the majority of cities and rural corporations of Indiana.

The solution to the problem of the worthy use of leisure lies not in commercialized amusement, avers Superintendent Wirt, but rather in a well grounded ability in and appreciation of the creative and the fine arts. No social agency reaches the masses as does the school—its responsibility is upon it and must be faced.



## No need for hot heads or cold feet in the school room

**I**N THE schoolroom, especially during the winter months, when the pupils' feet are more or less damp from rain and snow, the temperature variation between the breathing line and the floor line should be no more than 2 degrees. In the average incorrectly-ventilated schoolroom, the temperature variation is often 10 degrees, therefore with a normal temperature of 70 degrees at the breathing line, the floor will be 60 degrees. Under these conditions, the cold is exaggerated because it is a well known fact that the moisture, evaporating from the wet shoes, draws heat from both the feet and the shoes, making the feet uncomfortably cold. This places the pupil at a disadvantage, his studies suffer, so may his health.

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*Pioneers in Unit Ventilation*

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# *Your Everyday Problems:*<sup>\*</sup>

## The Relative Importance of Character Traits

BY JOHN GUY FOWLKES, PROFESSOR OF EDUCATION, UNIVERSITY OF WISCONSIN

**I** NTEREST in character education is unabated, and each week several inquiries concerning various phases of character education appear. One of the questions that is raised most frequently is the extent to which the judgments of various groups of persons agree when desirable character traits are being considered. In an attempt to determine at least a partial answer to this question, the following questionnaire was sent to some thirty different types of institutions:<sup>1</sup>

Your firm, or institution, is among those I assume to be interested in the important work of guiding the employed youth of..... educationally. As an educator, I desire data and suggestions from you which will aid us in placing the emphasis of our educational effort where it belongs. To save your time, I have compiled a list of positive qualities which have been suggested to me as valuable in the development of character.

Please read carefully the list of character traits and weigh their values in your own mind. Then, to the left of each trait, place numerals from "0" to "10" indicating the comparative values of the traits in the development of character; "0" represents the absence of value; "10" represents the greatest value assignable. Place the list in the inclosed self-addressed and stamped envelope and mail.

### *List of Character Traits*

- |                         |  |
|-------------------------|--|
| —Adaptability           | —Neatness                              |
| —Appreciation           | —Punctuality                           |
| —Courtesy               | —Open-mindedness                       |
| —Cooperation            | —Sociability                           |
| —Responsibility         | —Service to society                    |
| —Reverence              | —Tact                                  |
| —Self-Judgment          | —Thrift                                |
| —Sympathy               | —Thoroughness                          |
| —Courage                | —Unselfishness                         |
| —Desire for improvement | —Sportsmanship                         |
| —Foresight              | —Consciousness of the need of guidance |
| —Generosity             |  |

- Good health
- Gratitude
- Honesty
- Happiness
- Industry
- Initiative
- Judgment
- Morality

- Loyalty
- Power of discrimination
- Civic righteousness
- Consideration of others
- Bravery

Any additional suggestions from you will be greatly appreciated. Please write them on the back of this sheet.

Firm or institution.....  
 Name of respondent.....  
 Date ..... Position .....  
 Approximate number of boys and girls with whom you deal.....

Four hundred and thirty-three copies of the questionnaire were distributed. The returns of the questionnaires distributed are presented in Table I.

Although only fifty-three out of the 433 questionnaires were returned, these questionnaires indicated that 7,307 juveniles were represented. Out of the 7,307 represented, 3,575 were represented by the clergy and social workers, while 3,722 were represented by the employers. In addition there were nine respondents who did not state the number of young people they represented. If it is assumed that the average for the nine was the same as for the forty-four, there should be 20 per cent added to the total of 7,307, which would bring the corrected total up to 8,744. The representation of young persons in the returns of the questionnaire is much more satisfactory than the representation of respondents.

Inasmuch as the church is considered as one of the most powerful agencies in character training, it is essential for professional educators to be familiar with the judgments of the clergy with respect to desirable or essential character traits. Table II shows a comparison between the judgments of ten clergymen and forty-two employers as to the relative importance of the traits being considered.

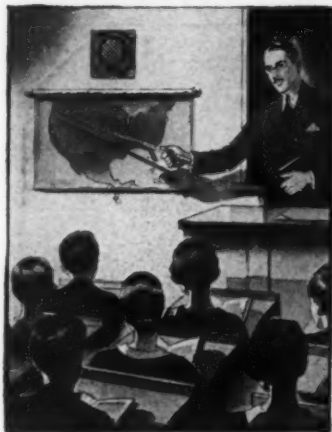
The correlation between the judgments of the clergy and the judgments of the employers is extremely low. If both columns of character

<sup>\*</sup> Discussions in this department deal with problems that frequently confront principles and superintendents. Inquiries on problems of this nature should be addressed to Doctor Fowlkes.

<sup>1</sup> Acknowledgment is made to F. A. Maas, a graduate student at the University of Wisconsin, upon whose work this discussion is based.



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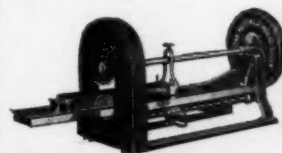
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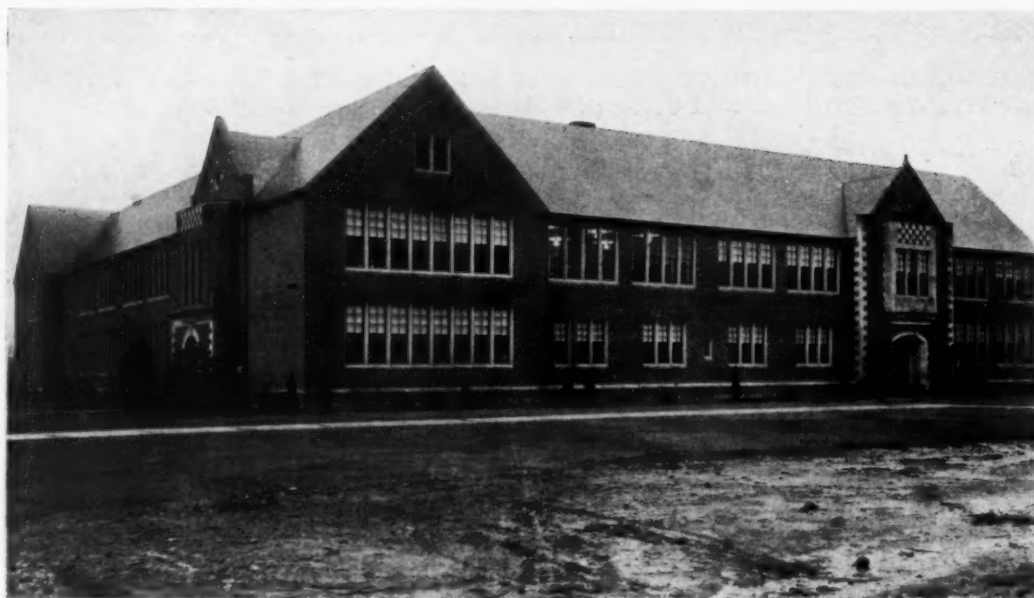
Saves enough bread in the average kitchen to pay for itself in four months' time! Hand or motor operated, two sizes.

TABLE I—DATA CONCERNING RETURNS ON THE QUESTIONNAIRE

<i>Group to which questionnaires were sent</i>	<i>Number sent out</i>	<i>Number returned</i>	<i>Number of young persons represented</i>	<i>Number not stating representation</i>
Churches .....	73	10	3,275	1
Social settlements .....	7	1	300	
Soap manufacturers .....	8	0	0	
Hotels .....	20	4	195	1
Box manufacturers .....	16	1	100	
Banks .....	7	1	10	
Candy manufacturers .....	38	6	470	1
Department stores .....	13	2	10	
Engine manufacturers .....	5	0	0	
Electrical manufacturers .....	47	5	396	1
Knitted goods manufacturers .....	53	4	165	2
Glove manufacturers .....	22	3	162	1
Shoe manufacturers .....	44	5	119	
Soft drink manufacturers .....	46	1	0	
Public service .....	6	1	1,000	
Newspapers .....	18	1		
All others .....	10	8	1,105	2
Totals .....	433	53	7,307	9

TABLE II—HOW JUDGMENTS OF CLERGYMEN AND EMPLOYERS AGREE

<i>Trait</i>	<i>Clergymen</i>	<i>Rank</i>	<i>Trait</i>	<i>Employers</i>	<i>Rank</i>
Morality .....		1	Honesty .....		1
Honesty .....		2	Good Health .....		2
Responsibility .....		3	Loyalty .....		3
Thoroughness .....		4	Cooperation .....		4
Industry .....		5	Punctuality .....		5
Desire for improvement .....		6	Responsibility .....		6
Loyalty .....		7	Desire for improvement .....		7
Unselfishness .....		8	Thoroughness .....		8
Gratitude .....		9	Morality .....		9
Cooperation .....		10	Neatness .....		10
Reverence .....		11	Thrifty .....		11
Open-mindedness .....		12	Judgment .....		12
Punctuality .....		13	Initiative .....		13
Good health .....		14	Courtesy .....		14
Courage .....		15	Industry .....		15
Courtesy .....		16	Open-mindedness .....		16
Need of guidance .....		17	Happiness .....		17
Tact .....		18	Foresight .....		18
Sympathy .....		19	Adaptability .....		19
Neatness .....		20	Consideration of others .....		20
Initiative .....		21	Tact .....		21
Thrifty .....		22	Power of discrimination .....		22
Service to society .....		23	Sportsmanship .....		23
Self-judgment .....		24	Unselfishness .....		24
Judgment .....		25	Appreciation .....		25
Foresight .....		26	Civic righteousness .....		26
Adaptability .....		27	Self-judgment .....		27
Consideration of others .....		28	Courage .....		28
Happiness .....		29	Need of guidance .....		29
Civic righteousness .....		30	Sociability .....		30
Sportsmanship .....		31	Generosity .....		31
Appreciation .....		32	Gratitude .....		32
Generosity .....		33	Service to society .....		33
Sociability .....		34	Sympathy .....		34
Power of discrimination .....		35	Reverence .....		35
Bravery .....		36	Bravery .....		36



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TABLE III—A COMPARISON OF THE COMPOSITE RANKING OF SOME CHARACTER TRAITS BY BOTH CLERGY AND EMPLOYERS TO THAT BY PUPILS IN A MODERN VOCATIONAL SCHOOL

Clergy and Employers		Pupils	
Trait	Rank	Trait	Rank
Honesty .....	1	Honesty .....	1
Responsibility .....	2	Courtesy .....	2
Morality .....	3	Cooperation .....	3
Thoroughness .....	4	Responsibility .....	4
Loyalty .....	5	Judgment .....	5
Desire for improvement .....	6	Service to society .....	6
Good health .....	7	Guidance .....	7
Punctuality .....	8	Sportsmanship .....	8
Industry .....	9	Sociability .....	9
Neatness .....	10	Good health .....	10
Thrift .....	11	Civic righteousness .....	11
Initiative .....	12	Desire for improvement .....	12
Courtesy .....	13	Open-mindedness .....	13
Open-mindedness .....	14	Discrimination .....	14
Judgment .....	15	Unselfishness .....	15
Foresight .....	16	Loyalty .....	16
Unselfishness .....	17	Adaptability .....	17
Adaptability .....	18	Tact .....	18
Happiness .....	19	Courage .....	19
Tact .....	20	Sympathy .....	20
Consideration for others .....	21	Foresight .....	21
Cooperation .....	22	Morality .....	22
Courage .....	23	Industry .....	23
Guidance .....	24	Initiative .....	24
Gratitude .....	25	Consideration for others .....	25
Self-judgment .....	26	Generosity .....	26
Sportsmanship .....	27	Bravery .....	27
Reverence .....	28	Appreciation .....	28
Appreciation .....	29	Self-judgment .....	29
Civic righteousness .....	30	Thrift .....	30
Sympathy .....	31	Thoroughness .....	31
Service to society .....	32	Reverence .....	32
Discrimination .....	33	Neatness .....	33
Sociability .....	34	Punctuality .....	34
Generosity .....	35	Happiness .....	35
Bravery .....	36	Gratitude .....	36

traits are considered and divided into  $33\frac{1}{3}$  percentile groups, it will be found that in the upper third there are only six out of twelve traits in common. The other twelve traits find nine of their corresponding traits in the middle group and three in the lower third. If the middle  $33\frac{1}{3}$  percentile groups are considered, it will be found that there are only three traits in common in this group, and eighteen find their corresponding traits in other groups, ten being in the lower third and eight in the upper third. When the lower thirds are studied, it will be found that four fall in the same group, and sixteen are found in other groups, three being in the upper third and thirteen in the middle third.

It is interesting to note how the judgments of the clergy and the employer disagree. The employer values most highly thrift, neatness, punctuality, cooperation, loyalty, good health, while the clergy apparently cling more closely to

open-mindedness, reverence, gratitude, unselfishness, desire for improvement, industry, thoroughness, responsibility and morality. It would seem that there is marked need for either the clergy or employers to revise their standards of value or to define the various *sine qua non* traits of life which are used so loosely.

Table II presents a comparison of the ranking of character traits by clergy and employers and by pupils in a modern vocational school.

Table III presents positive evidence that the adult and adolescent youth are in disagreement about what seems important in the matter of character traits. It is reasonable to conclude that the problems that present themselves to youth represent traits that are biological, or else pupils may have been made more conscious of them through recent contacts with school.

It is extremely interesting to examine the almost complete lack of agreement in the orders

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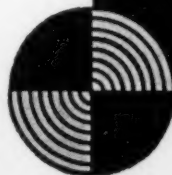
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of the adult and pupil lists. If the rankings of the two groups are divided into thirds, several illuminating facts are revealed. Only three traits are found in the first third of both groups—honesty, responsibility and desire for improvement. Four traits are found in the upper third of the adult ranking that are found in the last third of the pupil ranking—thoroughness, punctuality, neatness and thrift. On the other hand, there are four traits in the upper third of the pupils' ranking that are found in the lower third of the adult ranking—sportsmanship, civic righteousness, service to society and sociability.

From the data presented in Table III, it is plain that adults and vocational school pupils do not have the same conception of the relative importance of personal character traits. Professional educators might do well to consider these and other similar data in the building of character education curricula.

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## Educating the Community Through Municipal Universities

A news story in this issue of The NATION'S SCHOOLS announces that a Municipal University is to be established in Omaha, Neb. As a sidelight on this announcement, the following comments on municipal universities by Charles W. Taylor, superintendent of public instruction for Nebraska, in the *United States Daily*, are particularly apropos:

"The revised statutes of Ohio," says Mr. Taylor, "define a municipal university as one supported in whole or in part by municipal taxation, hereby defined as an assemblage of colleges united under one organization or management, affording instruction in the arts, sciences, and the learned professions, and conferring degrees.

"Thus the municipal university is a public tax supported institution, of which the state univer-

sities are the most common examples. Why the need of such an institution?

"At best the schooling of a decade ago was spasmodic. The smaller communities offered only curtailed opportunities. When these opportunities were exhausted, school days were over for the majority of the youth in those communities.

"But the minority, small indeed, persisted in going to the larger centers. Time proved that this additional training was advantageous; yet the fact remained that the masses could not participate in added educational opportunity.

"There was no equality of opportunity beyond the elementary school. The smaller community could not be depopulated of its youth—and the expense of centralized school attendance was prohibitive.

"An added and very important consideration was the breaking up of the home too early in the family's life. When a child leaves for school he is usually gone for good. He seldom returns to live in the home town if he goes away for his education.

#### Why Municipal Universities Are Needed

"To this problem there was but one solution: bringing the educational advantages to the community, instead of sending the community's youth to the educational centers. This has resulted in the establishment of high schools in all of our smaller towns and in many of our rural communities.

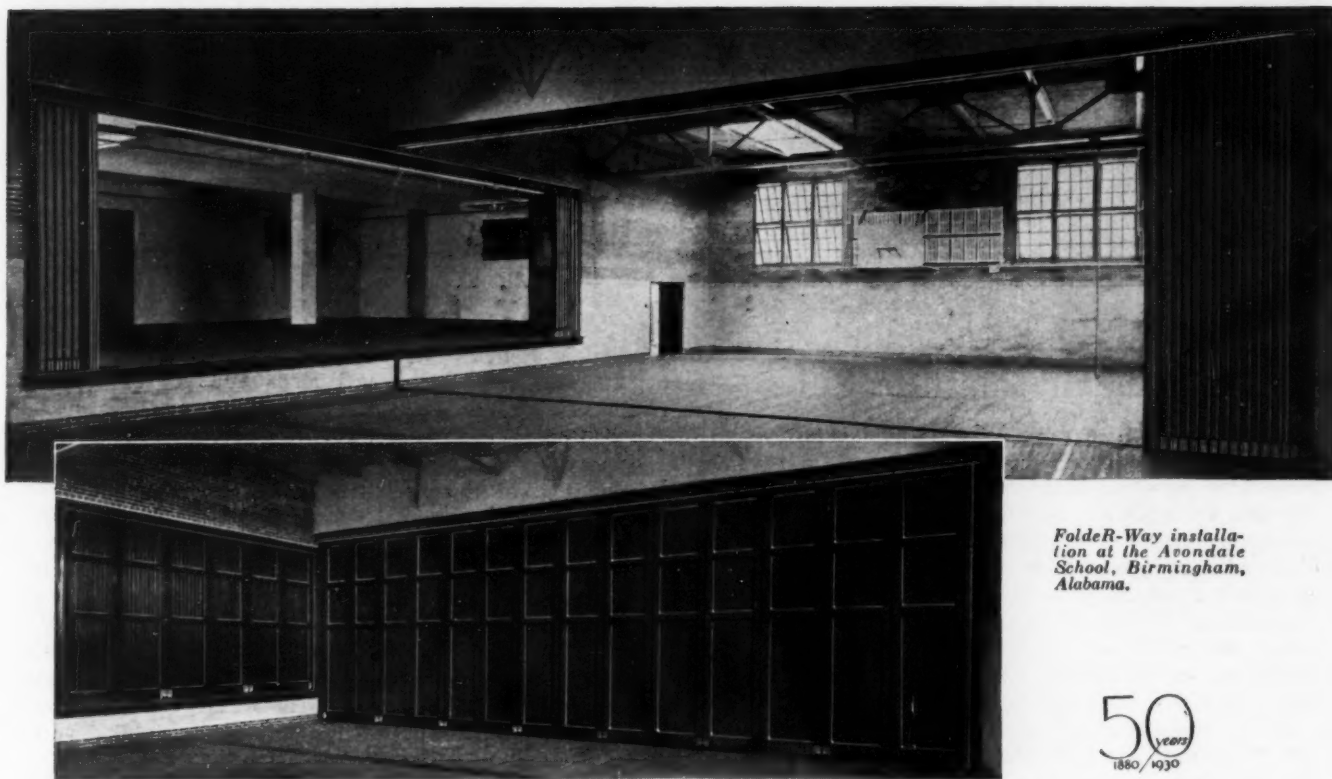
"As a further step in the educational process, we have just now universalized secondary educational opportunity. But, when our masses of youth are through the high school, we are confronted with the same old problem of sending immature youths away from home to the collegiate educational centers.

"And, as before, only the few can go because of the economic handicap. The answer to the question, as before, is to bring collegiate educational advantages to the community by establishing municipal universities as an adjunct to our high schools.

"This program has meant that the process of educating our youth will be carried on in home environment rather than away from it.

"The original and outstanding purpose of the municipal university is to develop intelligent and efficient citizens, to lend the city in the most comprehensive sense, its services in the way of expert advice and cooperation, and to provide the means whereby all its citizens, of whatever age, save those who are financially most unfortunate, can secure a complete education in a home environment at slight cost."





FoldeR-Way installation at the Avondale School, Birmingham, Alabama.

50  
years  
1880-1930

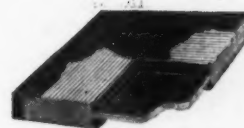
## Gymnasium divisible 3 ways with FoldeR-Way partition doors

Here FoldeR-Way makes possible a three-way division of gymnasium and "gallery" space. A sliding-folding partition cuts the "gym" itself in half or throws both halves open into one great sporting arena. The raised "gallery" for spectators may be partly or entirely open, permitting a view of the whole gymnasium or of either half; or this elevated space may be completely closed off for separate gatherings.

FoldeR-Way equipment is used in hundreds of unique arrangements which utilize every foot of floor space and make for the maximum of convenience in various school activities.

The outstanding features of FoldeR-Way installations are absolute silence and ease of operation. One man can quickly move the largest of FoldeR-Way partition doors. Maintenance expense is negligible; adjustments simple and infrequent.

When it comes to figuring on big openings or little ones, consult an R-W engineer; doorways are his specialty. Write today for R-W catalog.



The beauty and smooth operation of R-W Compound Key Veneered doors are lasting. Sagging, warping, swelling, shrinking are practically eliminated by tongue and groove method of applying veneer. These famous doors are now made exclusively and sold only by R-W for FoldeR-Way partitions.



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## News of the Month

### School Buildings Head Public Works Contracts in Fourteen Cities

School buildings represent the largest single item in the total contracts for public works in a group of fourteen of the principal American cities, including New York, Chicago, Philadelphia, Boston, Detroit, Cleveland and St. Louis, during the decade ending December 31, 1928, it is disclosed in an extensive survey made by Dr. Leo Wolman on public construction conducted under the direction of the National Bureau of Economic Research for the committee on recent economic changes of the President's conference on unemployment. The Department of Commerce furnished material for the survey.

Doctor Wolman's survey has been published under the title "Planning and Control of Public Works." The survey was made at the suggestion of President Hoover for the purpose of showing the importance of public works construction as a factor in economic balance.

The fourteen cities were chosen as typical examples of what has been accomplished generally throughout the country in the construction of public works. The remaining cities for which figures are given are Albany, N. Y., Buffalo, N. Y., Indianapolis, Ind., Newark, N. J., New Haven, Conn., Rochester, N. Y., and St. Paul, Minn.

School buildings, the survey notes, maintained the lead in the average of the fourteen cities, in the face of large expenditures in other directions which have been characteristic of the period.

A total of \$1,019,247,000 was expended in the decade in New York for public construction of which \$285,195,000, or virtually 28 per cent went for the erection of educational buildings.

#### *School Expenditures Outstanding in Chicago*

The ten-year expenditure for educational buildings in Chicago was far ahead of that for any other item, reaching a total of \$142,574,000 as against a total of \$307,699,000 for all public works. In 1928, a total of \$22,423,000 was spent for public and private educational buildings, more than half of the total expenditure for public construction which was \$44,597,000.

Philadelphia's ten-year expenditures for educational buildings amounted to \$72,107,000 or more than 28 per cent of the total during the same period for public construction which was \$257,159,000.

Close to \$34,000,000, actually \$33,754,000, was expended in the period by Boston for educational buildings, as against \$91,349,000 for all public works, or nearly 37 per cent.

In Detroit \$63,069,200 was expended in the period for educational construction, which is more than 30 per cent of the \$208,124,000 which was spent for all public works.

The educational building item for the ten-year period in Cleveland was \$45,504,500 which was more than 32 per cent of the public works total of \$140,521,000.

St. Louis expended \$23,550,000 for educational buildings

out of \$87,067,000, the total for all public works construction, or more than 27 per cent.

Albany, N. Y., expended \$6,636,000 for educational buildings, total public construction for the ten-year period amounting to \$23,225,000. The proportion was about 28 per cent.

Buffalo, N. Y., expended \$30,147,000 on educational construction, or more than 42 per cent of the total expenditure for public works which was \$70,755,000.

Indianapolis, Ind., expenditures for educational buildings, amounting to \$16,212,000, were over 30 per cent of the total public works figures which were \$53,814,000.

More than 27 per cent of the total public works expenditures in Newark, N. J., were for educational buildings, the total for the latter item being \$13,369,000, and \$48,819,000 representing the total for public works construction.

Approximately 85 per cent of the expenditures in New Haven, Conn., were for educational buildings. The school item was \$27,368,200, the total for public works during the period being \$31,980,000.

Nearly 39 per cent of the total in Rochester, N. Y., or \$16,940,000 went for educational buildings, out of \$43,820,000, expended for public works.

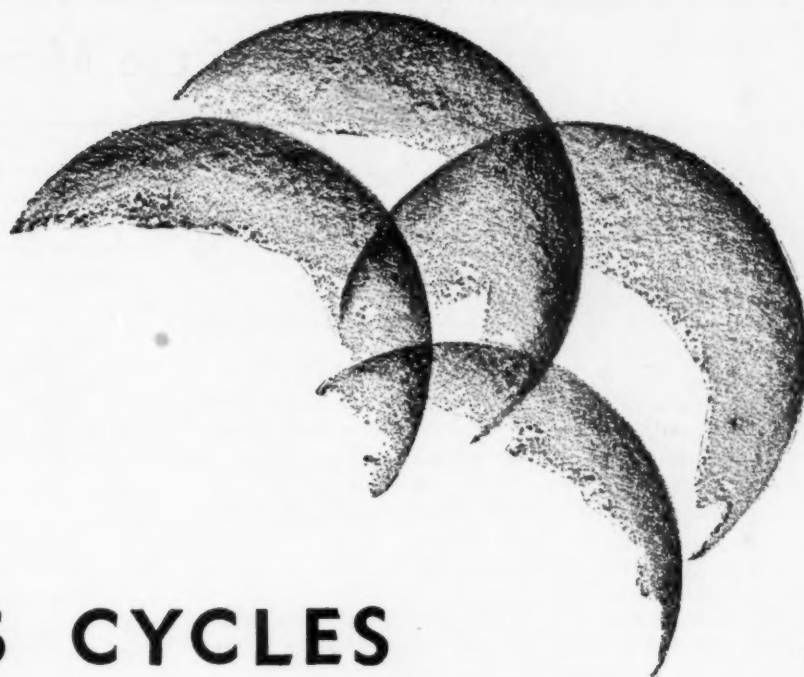
School building expenditures during the ten-year period in St. Paul, Minn., amounted to nearly 44 per cent of the public works item, \$8,485,000 having been expended for educational building construction out of \$19,380,000.

### Courses for Abnormal, Subnormal Pupils on the Increase

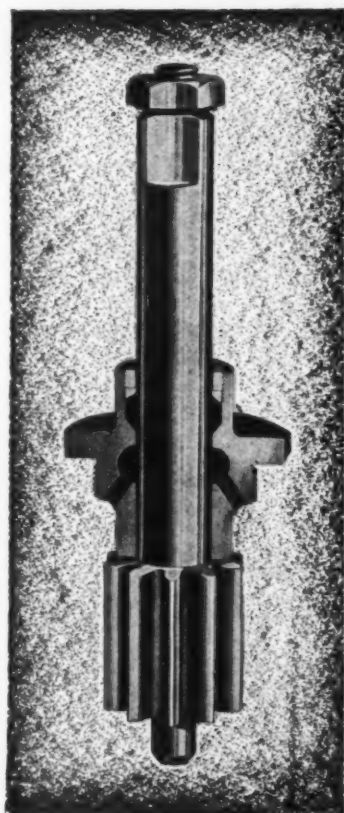
Increasing attention is being given to the education of subnormal and abnormal children in the United States, according to Dr. William John Cooper, commissioner of education. He made this statement in a letter to the Secretary of the Interior, accompanying a survey of special types of schools and classes of this character just published by the Office of Education.

It is disclosed in the survey that there are 736 cities in the country with a population over 10,000 which now have special classes and schools to reach those children deviating from average capacity. These facilities care for sixteen types of special education.

The sixteen types of special courses involve: the parental school; the disciplinary school or class; schools and classes for subnormal children; trade schools and classes for deviates; industrial schools and classes for elementary pupils; schools and classes for over-age children; schools and classes for non-English speaking children; schools and classes for gifted children; open air classes for the delicate; schools and classes for children with speech defects; those for crippled children, for the blind, and for children with defective vision; classes for the deaf and for children hard of hearing; and special classes for the education of epileptics.



## CEASELESS CYCLES



An increase of 15% in bearing space results in an increase of 25% in the life of the 1930 NORTON DOOR CLOSER. And the NORTON has long been famed as the most durable door closer made! ▲ ▲ This increase in bearing space is not the only feature which makes the NORTON long-lived. An ingenious packing nut, developed in our own research laboratories, absolutely eliminates any possibility of leakage. And a new spring, of specially tempered steel, is far stronger and more resilient—doing its share toward achieving the NORTON ideal . . . ceaseless cycles of completely trouble-free service ▲ ▲ NORTON has achieved that ideal. The largest individual manufacturer of door closers in the world, theirs is a specialized product. Architects everywhere specify NORTON for continuously perfect door closer comfort.

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# NORTON DOOR CLOSERS



## News of the Month

### Experts Specify Books for the New High School Library

For the person called upon to start a basic book collection for a high school, the American Library Association has just published a list called "500 Books for the Senior High School Library."

Selections, made by the vote of twenty-four representative high school librarians, have been so carefully chosen that they form a practically indispensable collection. Descriptive notes are furnished for each title, and buying information is also given. Cataloguing and classification arrangement is provided with the future growth and enrichment of the library in mind.

Because it is restricted to 500 titles, the list will not satisfy the needs of any one school department for reference material nor will it be sufficient in recreational content, but it will form a nucleus to which other volumes may be added as rapidly as is feasible.

Particularly adapted to the needs of the superintendent of schools who is obliged to do without the service of a librarian in ordering, the list, after having been checked for titles the school already has, might well be turned over to the book jobber with instruction to order the remaining titles. Its brevity makes it a safe list where expenditures must be guarded. It is issued in paper cover and priced at seventy-five cents.

### Vienna Opera May Make and Distribute "Sound Films"

The Vienna opera is seriously considering the production of "sound" films for both domestic and foreign consumption, according to a statement reported by the Viennese press as having emanated from the general manager of the organization, the motion picture division, Department of Commerce, is informed.

At the present time the plans are in the formative stage and many details regarding the adaptability of the present operas and stage settings must be settled before definite steps can be taken. It is reported that as soon as these questions can be settled satisfactorily, a company will be formed. The opera management believes that tone films showing performances of the world famous Vienna opera would be in great favor not only in Europe but also in America.

### Thousands of Playgrounds Assist in Wood Utilization Project

Two million children attending over 7,000 playgrounds in America will be given an opportunity to participate in the secondhand wooden container utilization program of the national committee on wood utilization of the Department of Commerce. This announcement is made by Howard S. Braucher, secretary, Playground and Recreation Association of America.

Under the committee's plan, old boxes, crates and odd pieces of lumber heretofore thrown away or burned are being utilized by boys and girls all over the country to

make interesting and useful articles. The committee has issued a booklet, "You Can Make It," which describes in simple language more than a hundred such articles. This booklet is now being used by playground departments and associations as a guide in connection with "You Can Make It" contests which they stage alone, in cooperation with newspapers and other agencies, or as a part of their regular playground activities.

"Besides creating widespread interest in the utilization of lumber commonly wasted, or destroyed," says Mr. Braucher, "wood utilization contests and programs provide useful and amusing employment for boys and girls during their spare hours, and give them an opportunity to acquire an elementary knowledge of the essential points of wood construction in their various applications. Furthermore, those physically incapacitated for more strenuous competition or activities are frequently able to participate in these contests on an equal basis with other boys."

### New Junior High School to Stand on an Eleven-Acre Site

The new junior high school that is planned for Newton, Mass., will stand on an eleven-acre site in the heart of an old residential district. The school, which is expected to be completed by the Fall of 1931, will stand on the southwesterly end of the lot. A standard football gridiron and an equally large hockey field for girls, at least one standard baseball diamond and four tennis courts will be laid out on the remainder of the land on the campus.

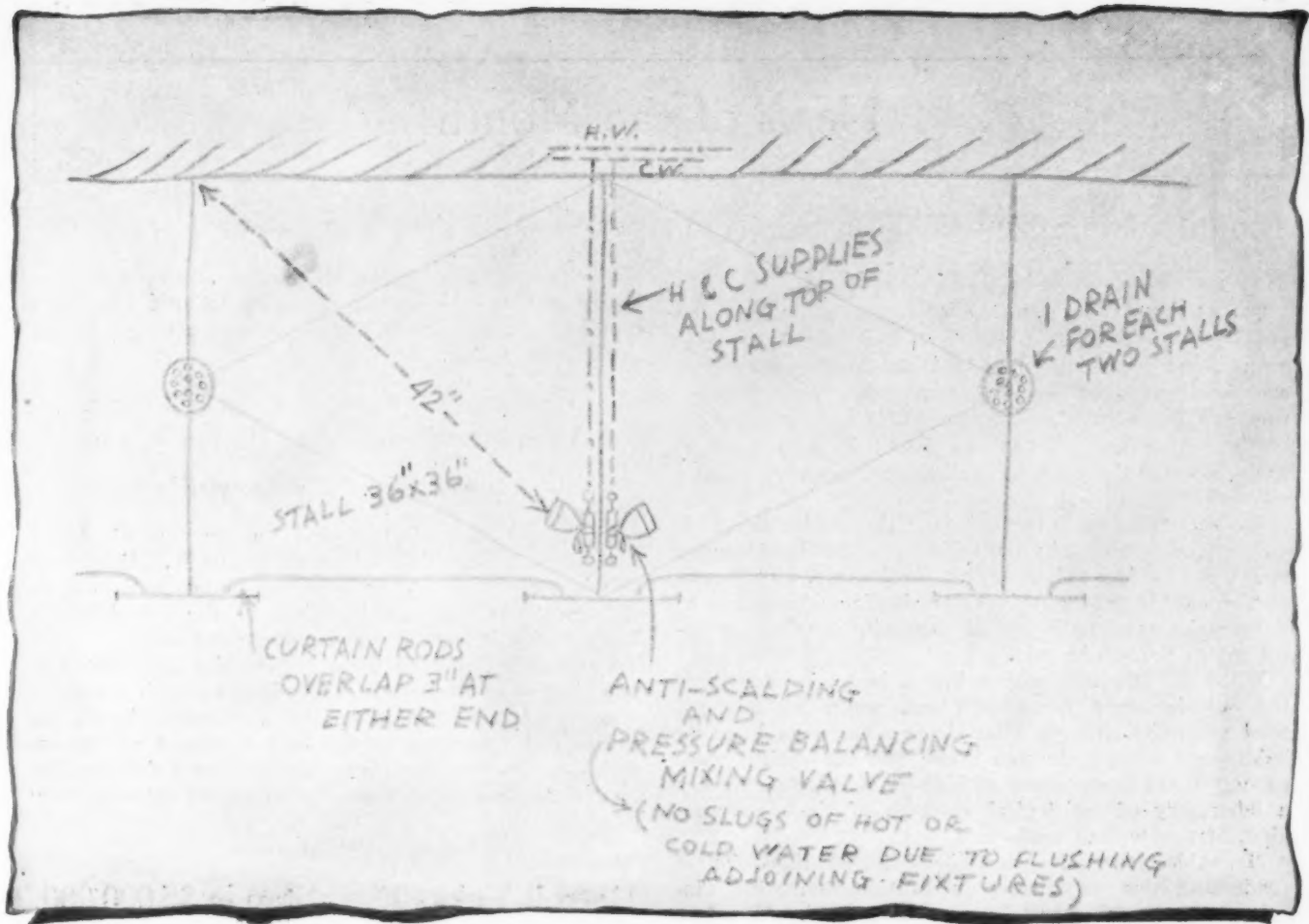
The school will accommodate more than 1,100 pupils.

The architectural style is a simplified form of English scholastic Gothic, perhaps best exemplified in England at Magdalen College, Oxford, and elsewhere at Oxford and Cambridge.

### Merger of Two Girls' Schools in the East Is Completed

With the merging of the Prospect Hill School, Greenfield, Mass., and the Stoneleigh School for Girls, Rye, N. H., a new institution for girls will be in readiness in Greenfield for the Fall enrollment on October 15. The building and land for the new school will cost approximately \$200,000, the purchase of which is made possible under the terms of the will of Elijah Coleman, a native of Greenfield who died in Philadelphia in 1880, which stipulated that certain funds were to be used for a "nonsectarian school for girls in this commonwealth."

The Prospect Hill School closed about twenty years ago but the board of trustees continue in charge of the funds left by Mr. Coleman. A part of the income has been used to provide music and, beginning last year, art instruction. The balance has accumulated until, it is said, there is about \$280,000 in the fund. With this sum on hand, the trustees felt that the time was ripe to establish a school in its own buildings. It was then that the Stoneleigh School officials were approached.



## This Pencil Sketch Made 1,000 Men Cleaner and Happier

Industry everywhere is rapidly swinging to the modern common-sense idea that workers' cleanliness, happiness and health must be zealously guarded in the plant.

For just this reason a large eastern com-

pany decided upon a new factory shower bath installation. A Clow Soldier of Sanitation was called in.

His answer was this rough pencil sketch. The ultimate result is an installation that gives the factory's 1,000 men shower facilities that the finest homes cannot equal for sheer practicability.

The shower head is located in a corner to gain the maximum spray area in a minimum space.

Spray is directed against a wall instead of a flimsy door curtain.

Controls are located just inside the door

to end reaching through an icy or scalding deluge to adjust water temperatures.

These are simple things. But they help to illustrate how the Clow Soldier of Sanitation does not come in to you merely to show pictures in a catalog. His job is to help you fight ill-health, discomfort, insanitation, pollution and disease.

And to help you achieve this end with the very minimum through-the-years cost.

At his finger tips is the sum total of Clow's 52 years specialized experience—at his back the most complete line of specialized fixtures in the world.



The Clow Soldier of Sanitation is your natural ally on every building job where sanitation is likely to be an acute problem: schools, hospitals, industrial plants, public buildings and the like. Call him in. "Van." W. Van B. Claussen, 47 W. 34th St., New York City.

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PREFERRED FOR EXACTING PLUMBING SINCE 1878

Consult your architect

## News of the Month

### Mountain Families Will Be Subjects in Unique Experiment

The United States Office of Education will install 100 radio sets in isolated mountain homes that have little or no contact with the outside world, to ascertain what are the cultural effects of this medium of education, it was announced by the Department of the Interior recently. A purpose of the experiment is to find out if radio can take the place of reading as a means of contact otherwise impossible.

As an educational experiment the undertaking is unique, the specialist in adult education, L. R. Alderman, stated orally in explaining its significance. It is one of the most concrete and truly scientific approaches to the correlation of radio and education in its widest meaning yet attempted, he said.

When the educator can go into a home, isolated from the outside world for generations, where no one can read and write, and see what changes are wrought in its habits and outlook through music and the spoken word coming direct from points of highest civilization, he has a laboratory of sociological research of the most vital kind, Mr. Alderman explained.

Mr. Alderman added that the Office of Education is conducting this experiment in collaboration with educators wherever the receiving sets are located. All points of location have not yet been selected, he said, but will be sufficiently divergent to serve as a cross section of the nation generally.

The educators will supervise this experiment with no preconceived notion as to what it will prove or disprove. Teachers for centuries have depended on printing to supplement their oral efforts, but much education was accomplished before printing was invented—even before writing was invented. Why should not persons who have received the ideas of others mainly through the sense of hearing be able to hear, understand, and learn from fellow humans whose voices come to them by means of radio?

If education cannot be accomplished in that way, the educators want to know it. If it can be, they want to make education available to as many as possible of the adults who are unable to go to college and who, possibly, have been unable to attend even an elementary school.

### Specialists Named to Study Teacher Training

The Secretary of the Interior, Ray Lyman Wilbur, announces the organization of a committee to study teacher training in the United States under the auspices of the Office of Education.

Provision for such a survey was made by Congress through the appropriation of \$200,000, and its purpose is "to make a study of the qualifications of teachers in the public schools, the supply of available teachers, the facilities available and needed for teacher training, including courses of study and methods of teaching."

The Commissioner of Education, Dr. William John Cooper, has been named the director, and Dr. Edward S.

Evenden, of Columbia University, has been appointed the associate director.

The personnel of the committee as announced by Secretary Wilbur comprises a group of eminent specialists to constitute a board of consultants to act as advisers in the undertaking.

### Work to Start Shortly on New School in Minneapolis

Work will start September 1 on the new \$1,025,000 Washburn senior high school, Minneapolis, Minn., and will be completed a year later, according to George R. Womrath, business superintendent of the school board. The school will have a capacity of 1,800 pupils.

The building will be three stories high and will contain thirty-five classrooms, an auditorium with a seating capacity of 1,800, two gymnasiums separated by sliding panels and numerous science rooms, special classrooms and study rooms. The plans also call for a future addition to the building to make the maximum capacity 2,500 pupils.

### Detroit Takes First Step in \$5,000,000 Building Program

Four of the twenty-three schools planned for Detroit are already under construction as the first step in Detroit's \$5,000,000 building program. Architects' drawings for eighteen other schools are either begun or completed.

### High School Pupil Is Winner of Art Award for Soap Sculpture

Soap sculpture has taken on new importance in art education this year with the establishment of an annual art school scholarship for the most promising young novice. Each year hereafter there is to be discovered and trained the most promising school worker in this new plastic art.

Edward Anthony, a seventeen-year old pupil of Wyandotte, Mich., was selected by the jury for the first scholarship award at the sixth annual competition which closed on June 30. The scholarship is awarded by the National Soap Sculpture Committee.

The popularity of carving in soap among school children is shown by the 5,000 entries exhibited at the American-Anderson Galleries in New York. More than 1,500 are done by children under fifteen years, and more than 800 by students under twenty-one. Entries came from all parts of the United States, not only from individual children, but from school groups under the supervision of a teacher. Some sixty-five of these groups were represented in the exhibition.

The competition is international in scope. Professionals, adult amateurs, and children in all parts of the world are eligible to compete in their respective classes for the \$3,100 in cash awards and other prizes offered.

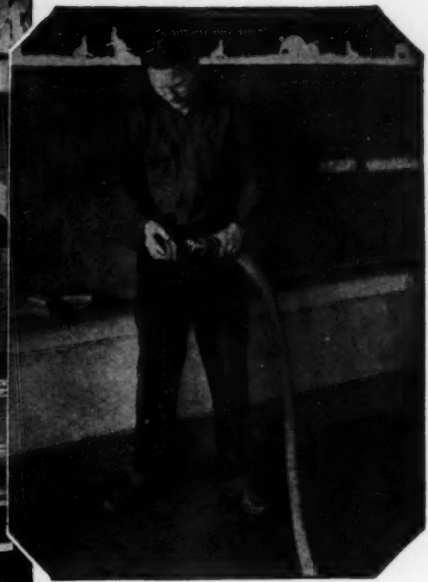




*Cleaning Linoleum  
in Class Room.*



*Cleaning Chalk Trays.*



*Cleaning Erasers.*

## When you remodel . . . or build a new school

**R**EMEMBER that of all the modern advantages that machinery can add to school operation there is none that benefits more people and saves as much money as the Spencer Central Cleaning System.

It cleans continuously . . . even during class time . . . the foot prints in the halls are erased with a vacuum pull that sucks all

dirt and dust to a container in the basement.

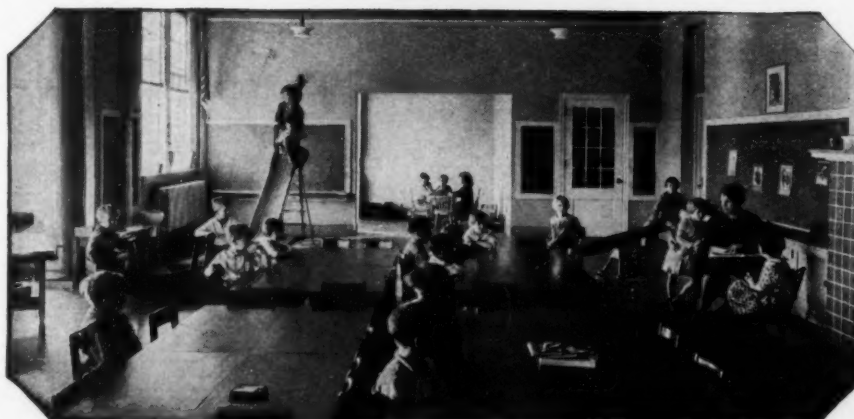
The degree of cleanliness is greater, the health of teachers and pupils is conserved and the net increase in expense is more than overcome by the saving in time and the saving of paint, books, floor coverings and decorations—because the Spencer Cleaned School is *perpetually clean*.

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HARTFORD, CONNECTICUT **CENTRAL  
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*Used by 1500 modern schools — endorsed by leading architects and educators.*



*A Modern Kindergarten—Spencer Cleaned.*



Ask for the new booklet "Modern Cleaning Methods for Modern Schools"

## News of the Month

### Dr. P. P. Claxton Goes Into "Active Retirement"

Dr. Philander P. Claxton has resigned as superintendent of schools, Tulsa, Okla., and has returned to his native state, Tennessee, where he is writing a history of education in Tennessee. As Doctor Claxton himself expressed it, he will be in "active retirement."

Doctor Claxton's career in education has been a brilliant one, from the time he began teaching at the age of twenty-four to the present time. During the administration of President Taft, Doctor Claxton was appointed commissioner of education and served ten years. Since that time he has been provost of the University of Alabama and superintendent of schools in Tulsa.

### Peoria Votes Big City School Program

A ten-year building program providing for the erection of three junior high schools, construction of one or more grade schools, and remodeling of another at an aggregate cost of \$2,844,000 was unanimously passed on by the board of education of Peoria, Ill., recently. Adoption of this program assures relief from the present crowded condition of the Peoria schools.

Through an increased taxation rate, the program will be carried out without the floating of any bond issues.

The first junior high school will be started in 1932 and finished in 1933. The second will be started in 1935 and the third will be begun in 1938.

### High School for Mountain Lakes, N. J., to Stand on Ten-Acre Site

Ten acres in the heart of Mountain Lakes, N. J., will comprise the site of a new public high school to be built at a cost of \$150,000.

In addition to the building itself, there will be recreation grounds and fields for football, baseball, squash and basket ball, as well as a running track. Work will begin on the school and the grounds during the coming year.

### Colleges and Universities Have Incomes of Over \$500,000,000

The income and receipts of the 1,217 colleges and universities in the United States amount to over \$500,000,000 annually, according to Dr. Walter J. Greenleaf, associate specialist in higher education, United States Office of Education.

New York State ranked first with over \$65,000,000 for the support of her sixty-four institutions of higher learning; Pennsylvania stood second, with over \$43,000,000 for her eighty institutions, and Massachusetts followed third, with over \$35,000,000 for thirty-six schools of this character.

Reckoned from the latest available statistics the income and receipts of colleges and universities in the United States in 1927-28 amounted to \$547,519,792, excluding additions to endowment. This figure represents revenue from all sources to be spent for higher education in 1,217 institutions of higher learning, including all colleges, universities, professional schools, junior colleges and teachers' colleges in the United States.

### Omaha, Neb., to Establish New Municipal University

The city board of education of Omaha, Neb., has been named as a board of regents for the new Municipal University that is to be established in that city. The new university will absorb the University of Omaha. The city has already voted a mill tax annually for its support which will produce nearly a third of a million dollars. The buildings and site of the University of Omaha will ultimately be sold, and new buildings provided.

### New Industrial High School in New York Named After Gompers

Work on the new Samuel Gompers Industrial High School for Boys, the Bronx, New York City, is expected to begin this Fall, according to a recent announcement. It is to cost \$1,660,000 and will provide for 1,700 pupils.

Features of the building include a radio room, press, linotype and composing rooms, as well as shops of every description. It will have telephone, motor and dynamo, electric light and power, and auto transmission and chassis shops and architectural drawing rooms.

Twin towers and an inner court feature the modernistic architecture of the school. In the center of the main façade between the two towers will be a covered driveway leading to a spacious inner court, from which there will be driveway exits from the automobile, milling and forge shops.

The interior of the building will also be of modern design. All available wall space in the lobbies of the tower entrances and the corridor leading to the auditorium are to be provided with recessed exhibit cases, in which the pupils' work will be displayed.

### Indiana County Superintendents Elect Officers

The Indiana County Superintendents' Association met recently in Indianapolis. The general theme of discussion was the problem of refinancing education in Indiana. Officials of the association for the coming year are: president, Ortha O. Hall, superintendent, the Lawrence County Schools, Bedford; vice-president, Lowell H. Moore, superintendent, Owen County Schools, Spencer; secretary, Roma L. Milnor, superintendent, Noble County Schools, Albion, and permanent secretary-treasurer, Robert E. Eckert, superintendent, Dubois County Schools, Jasper.



*Little time is required to install a floor like this. Note how the Armstrong's Linoleum Floor adds light and life to this Kindergarten Room in the Longfellow School, Pontiac, Mich.*

BEFORE  
SCHOOL  
OPENS

## ...there's still time to replace worn-out floors

**S**UMMER is almost over. Vacation comes to a close. Is your school building ready to welcome teachers and children when they return? How about the floors? Will they add light and warmth to the classroom? It is not too late to replace those that are shabby before school begins.

Colorful Armstrong's Linoleum Floors change the atmosphere of a recitation room. Not only do they brighten it, but what's more, they quiet floor-noises as well. Annoying classroom distractions are hushed

by an Armstrong Floor. Scraping chairs, dropped pencils, and clattering footsteps are muffled.

Armstrong's Linoleum is easily and quickly cleaned, too. The special Accolac-Processed surface makes it both spot-proof and stain-proof. The marks of muddy feet and things spilled can be wiped right up without leaving a trace. With an occasional relacquering or light waxing and polishing you can maintain its satiny finish for years.

There's an Armstrong's Linoleum Floor for every

room in your school. Among the numerous patterns you will find exactly what you want for classrooms, corridors, or dormitories.

Let us send you a copy of our illustrated book, "Public Floors of Enduring Beauty." Among other things it tells how an Armstrong's Linoleum Floor can be laid in one day's time. Our School Service Department will gladly help you, too, with suggestions or recommendations. Write to the Armstrong Cork Company, Floor Division, Lancaster, Penna.

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## News of the Month

### Second Week in November Set as "American Education Week"

The tenth American Education Week will be observed November 10 to 16. Its increasing popularity and effectiveness through the years have been due largely to the work the education journals of the nation have done to remind teachers of the opportunity it offers to interpret to the citizens the aims, needs and achievements of the schools.

The program of American Education Week for 1930 is sponsored by the American Legion, the United States Office of Education and the National Education Association. Many organizations, national, state and local, will cooperate in this event. The press, the radio, the pulpit and platform will aid in carrying information to the public about the schools. Interest in observing this occasion is increasing each year. More extensive plans have been made for 1930 than ever before. The best results are obtained by making plans well in advance. The program will emphasize as in former years the seven cardinal objectives of education and will have for each day a suitable theme for special emphasis. This program, which is also used in other countries, will be adopted by each nation.

### Longer Summer Vacation for Pupils Asked by Worcester, Mass., Parents

In an attempt to obtain an earlier closing and a later opening of the schools of Worcester, Mass., 250 parents have filed a petition with the school board.

The burden of the protest is that the short vacation period now in effect is an injustice to the children. In order to assure a longer summer vacation, the parents ask that, if necessary, the weekly vacations throughout the year be eliminated. The petitioners request that schools close not later than the middle of June and open the second week in September instead of the first. They further ask that "the superintendent be requested to study the school calendar and to present at the first meeting in September a revised calendar."

### Annotated Bibliography of School Reports to Be Published

An annotated bibliography of all annual and other reports published by the city school systems throughout the country is being compiled by the United States Office of Education, the chief of American schools, W. S. Deffenbaugh, announced recently.

This is the first publication of this kind undertaken by the Federal Government, Mr. Deffenbaugh explained, and will contain a brief index summary of the contents of each report.

It will be of considerable value to educators, scholars and legislators in learning rapidly where to find specific information about all phases of education in practical operation throughout the nation.

By way of example, if one is interested in revenues and taxation for the support of public education, he can glance through the bibliography, find the references and call for the reports of the cities considered, then turn at once to that phase of their system, he said.

Already a number of cities have responded to requests for their reports, Mr. Deffenbaugh said, and the bibliography with the explanatory contents is in process of compilation.

The Office of Education has not decided definitely whether annual state reports on education will be included in the list or not.

### Chicago to Have New School for Backward Boys

A new school for backward boys is to be opened in Chicago this Fall in the Moseley school building. This is a part of the program of the Chicago schools in combating truancy and incipient crime through prevention methods.

The school will care for 500 boys and will be run for twelve months a year on a six-hour day basis. Building changes and equipment in the school will cost \$38,000. Manual training and gymnasium apparatus will be designed to attract pupils of retarded mentality, and it is hoped the plan will save many from contact with the juvenile court.

Harold H. Postel, former principal of the Drake School, has been named principal of the new school.

### Twenty-One New Schools Ready in New York This Fall

Twenty-one new schools, including five high schools, will be ready for occupancy in New York City this Fall. The new schools will have a seating capacity of 32,891, and represent a total cost of \$18,775,000. They are expected to reduce by 20,000 the number of pupils on short-time or special session.

The five high schools will accommodate 16,400 pupils and will cost \$11,800,000. The most costly building is the Evander Childs High School in the Bronx. The Abraham Lincoln High School and the Brooklyn Industrial High School for Girls are to be opened in Brooklyn. Queens is to have the John Adams High School.

### Boston Bars Nonresidents From Its Teaching Staff

All nonresidents of Boston are barred from teaching positions in the city schools, beginning September 1, following action taken by the school committee recently.

Opposed to the action was Dr. Jeremiah E. Burke, superintendent of schools, who said that Boston would be the only community in the commonwealth and the only large progressive city in the country limiting itself to choosing members of the teaching staff from residents.

# WASHING PAINT

It was never thought that the time would come when painted surfaces could be washed as easily as a china dish.

Yet in hundreds of buildings and institutions these surfaces are being successfully washed with



saving time and again the cost and inconvenience of repainting.



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"WYANDOTTE"

The J. B. Ford Co., Sole Mfrs., Wyandotte, Michigan

## News of the Month

### Last Five Years Show a Hundred New Schools in Chicago

One hundred new schools and additions have been added to the Chicago school system since 1925, according to the *Chicago Tribune*, which quotes from a report by Don C. Rogers, director of building survey for the board of education.

The report shows an increase of 90,592 seats during this period. The present program indicates a decided shift in the type of enrollment, calling for the provision of 87 per cent secondary seats and only 13 per cent of elementary seats. The seat shortage has lessened with the building program from 19 per cent in 1924 to 12 per cent in 1929. The senior high schools show the greater shortage, due to the increased enrollment.

### Burnham School Is the Result of an Unusual Bequest

The new Burnham School of Bridgeport, Conn., is now completed and ready to receive those pupils who will be the first to benefit by the generosity of Captain William Dixon Burnham, who at his death left the town of Bridgeport securities totaling nearly \$250,000. A library has also been built from the fund left by Captain Burnham.

Captain Burnham, who was with the American Hawaiian Steamship Company, spent his boyhood days with his parents on a farm in Bridgeport. For many years he was unable to return to his old home, but he always had a sincere affection for the town, which is evidenced by the bequest of \$250,000.

### Former Citizen of Morristown, Vt., Gives School to the Town

Morristown, Vt., is the possessor of a new \$250,000 high school building through the generosity of a former citizen, A. H. Copley of Boston. The school is named for Mr. Copley. The school was dedicated at the commencement exercises of People's Academy, June 20, and the presentation was made by Mr. Copley himself.

### Philanthropist to Help Build Public School

Pierre S. du Pont, philanthropist, will pay half the cost of a new public school in Kennett Square, Pa., to serve the communities of Kennett Square and New Garden, according to a recent proposition made by Mr. du Pont to the taxpayers of the two towns.

It is stipulated that the school shall cost between \$800,000 and \$1,000,000. The structure will accommodate 1,600 pupils from the lowest grade through high school. It is planned to make the building something of a community center with gymnasiums, cafeterias, music rooms, large

assembly halls and a cottage where girl pupils may be instructed in housekeeping.

With the completion of the new schoolhouse, Mr. du Pont will have sponsored and met the greater part of the expenses for the erection and equipment of all the school buildings within ten miles of his country home.

### New Schools Abroad Patterned After Ford Trade Schools Here

Trade schools patterned after the two divisions of the Henry Ford Trade School for Boys, Highland Park and Dearborn, Mich., are to be established in England and Russia. The English school will be temporarily placed at Manchester, but will be moved to Dagenham, London.

The Russian school is to be built and maintained by the Soviet government at Nizhni Novgorod and will be adjacent to "Autostroy," the name given to the plant to be built at that point for the manufacture of motor cars. The Russian school will not be connected with the Ford interests although it will benefit by the methods and educational experiments of the Ford schools.

### What the States Spend for Free Textbooks

Textbooks purchased for use in all public and private high schools and elementary schools of the United States caused an expenditure of \$39,024,067 in the latest year, 1928, for which figures have been prepared, according to information made available recently by the Office of Education.

This sum represented the purchase of 58,089,967 separate volumes, and more than nine-tenths of the expenditure was concerned with public schools, it was stated.

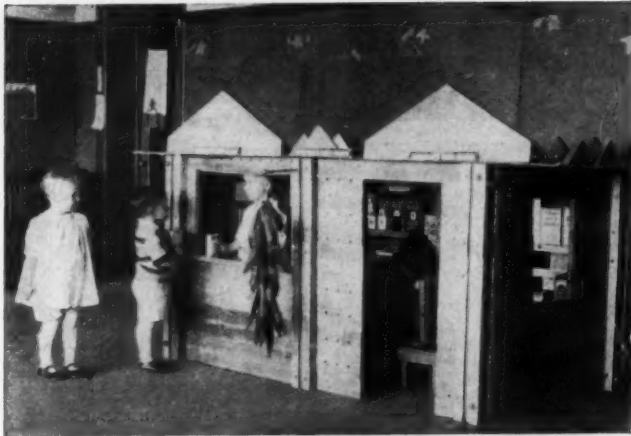
Of the books bought for public schools, 65.6 per cent of the expenditure came from state and other agencies providing free books for pupils. Boards of education expended \$23,256,151 in supplying free textbooks.

States that require textbooks to be furnished free to public school children are: Arizona, California, Delaware, District of Columbia (elementary only), Maine, Louisiana, Maryland, Massachusetts, Montana, Nebraska, Nevada, New Mexico, Kentucky (elementary only), New Hampshire, New Jersey, Oklahoma, Pennsylvania, Rhode Island, South Dakota, Texas, Utah (elementary), Vermont (elementary), and Wyoming.

### District School Will Serve Two Townships Jointly

A new school serving jointly two townships is the gift of Frank E. DeLong, Washingtonville, Pa. A six-room building is to be erected and equipped by Mr. DeLong to serve the Derry township and Washingtonville Borough school district. The district will bear the expenses of conducting the school.





*Happy Builders Store. Built with set No. 3. The whole class benefits from this project.*

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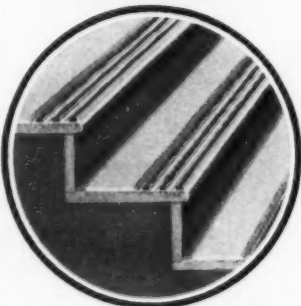
Used in practically every state in the Union, American Portable Schools provide regulation size classrooms with proper lighting and all comfort. They are easy to heat and well ventilated.

New double wall construction consists of siding, insulating paper, sheathing on outside of studding and Insulite (5 times the insulating value of plaster) on inside. Austral windows. Double exits. Double floors.

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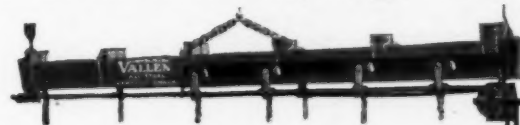
In addition to making stairs safe, Wooster Treads wear slowly and evenly, prolonging the life of the stairs by

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*Successor to The Safety Stair Tread Company*

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The Vallen Noiseless, All-Steel Safety Track is ideal for school or auditorium use. Easily installed on any stage by inexperienced workmen. Easily operated by pupils. Used in hundreds of theatres, schools and auditoriums. Absolutely reliable, practical, strong and safe. Can be furnished for manual or electrical operation. Write for detailed information.

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# VALLEN



## In the Educational Field

GRANVILLE B. JEFFERS, deputy superintendent of schools, Schenectady, N. Y., has resigned and will be succeeded by HARRY J. LINTON. DR. JOHN E. BURKE, school medical supervisor, has been appointed assistant superintendent in charge of health, a recently created position.

CHARLES C. UNDERWOOD, director of elementary education, Indianapolis, Ind., has resigned.

FLOYD CLEVELAND WILCOX has been appointed president of Frances Shimer School, Mt. Carroll, Ill., to succeed WILLIAM P. MCKEE who resigned recently after more than thirty years of service.

FREDERIC S. ARMSTRONG, principal, Dartmouth High School, Dartmouth, Mass., has resigned his position and will enter a theological seminary this Fall to study for Episcopal orders.

NORMAN D. BAILEY has resigned as superintendent of schools, North Kingstown, R. I. He will be succeeded by H. A. DAVIS.

L. N. MORRISETT, principal, Roosevelt Junior High School, Oklahoma City, Okla., has been advanced to the principalship of Classen High School, one of the state's highest positions in secondary school work.

ARTHUR J. KLEIN, for five years chief of the division of colleges and professional education, United States Office of Education, has resigned to accept a position as professor of higher education in the department of school administration, college of education, Ohio State University.

FRANCES A. KLOSEMAN succeeds GEORGE W. GARDNER as principal of the Mercer School, Pittsfield, Mass. By the change, MISS KLOSEMAN takes command of the buildings in which she received practically her entire education.

COLE B. HANYEN, superintendent of schools, Kingston, Pa., died recently. He was sixty-one years old and had been superintendent of the combined Kingston and Doranceton schools for twenty-four years.

ROBERT E. WILLIAMS, head of the high school at Lambertville, N. J., for the last four years, has been promoted to the newly created post of supervising principal.

NETTIE P. CLARK, principal of Fairview School, Binghamton, N. Y., and the oldest teacher in point of service in the schools of that city, died recently at the age of eighty-four. MISS CLARK had been a teacher in the Binghamton schools for fifty-two years.

JOHN H. HERRING, superintendent of schools, Lambertville, N. J., has resigned. He has been connected with the Lambertville schools since 1917.

DR. SAMUEL TYNDALE WILSON, president of Maryville College, Maryville, Tenn., for the last twenty-nine years, has resigned. He will be succeeded by DR. RALPH W. LLOYD, a former student of the college and now pastor of the Edgewood Presbyterian Church, Pittsburgh.

C. V. COURTER, superintendent of schools, Oak Grove, Flint, Mich., has been named superintendent of schools, Dayton, Ohio, succeeding PAUL C. STETSON who has accepted the superintendency of the Indianapolis, Ind., schools.

DEWEY STONE has been named superintendent of schools, Stoutsville, Fairfield County, Ohio. MR. STONE was formerly connected with the schools of Logan, Ohio.

DR. ROBERT N. MONTGOMERY is the new president of Tarkio College, Tarkio, Mo. DOCTOR MONTGOMERY, the son of PRESIDENT J. KNOX MONTGOMERY, Muskingum College, Muskingum, Ohio, became president of Tarkio College on his thirtieth birthday.

LOUIS P. ADAMS, superintendent of schools, Burlingame, Calif., has been chosen to head the schools of San Bernardino, Calif.

SISTER MARY VICTORINE, superintendent, St. John's Convent and principal, St. John's Parochial School, Jersey City, died recently after an illness of four days.

J. STEVENS KADESCH has been named superintendent of schools, Medford, Mass., succeeding HERBERT H. HOWES who resigned to accept the principalship of the Hyannis Normal School, Hyannis, Mass.

CLAUDE L. KULP, assistant superintendent of schools, Ithaca, N. Y., has been appointed to the full superintendency to fill the vacancy caused by the death of DR. F. D. BOYNTON.

MRS. ROSA G. BARGER is the newly elected superintendent of schools, Kanawha County, West Virginia, succeeding O. EMERSON CAMP.

H. W. PIGGOTT, principal of the Parkersburg High School, Parkersburg, W. Va., has been elected superintendent of schools of that city. MR. PIGGOTT is succeeded by E. E. CHURCH.

SAMUEL H. WHITE has resigned as principal of Amenia High School, Amenia, N. Y., to become superintendent of schools, Chester, Vt. He is succeeded by HOWARD LONSDALE.

WILLIAM E. ENNIS, president, board of education, Ansonia, Conn., has resigned.

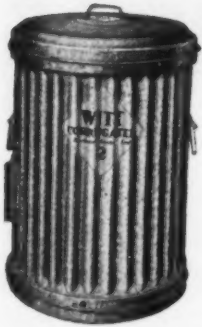
I. W. HARTSFIELD, principal elect of the Greenville High School, Greenville, Texas, has resigned to become superintendent of the schools of Hillsboro, Texas.

H. R. MCVAY, superintendent of schools, Athens County, Ohio, has resigned. He is succeeded by ALEX ROOT, Athens, Ohio.

J. H. SCHOLL, for the last five years superintendent of schools, Milton, Ind., has resigned. MR. SCHOLL has a long record of service in Indiana schools, having served for forty-one years.

W. H. EYESTONE, formerly superintendent of a private industrial school for boys in Dallas, Texas, has been named superintendent of schools, Goodhue, Minn., succeeding A. O. FINSETH, resigned.

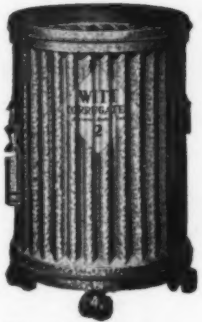
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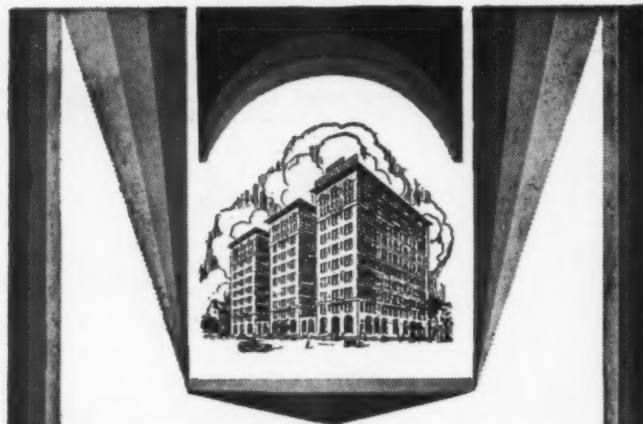
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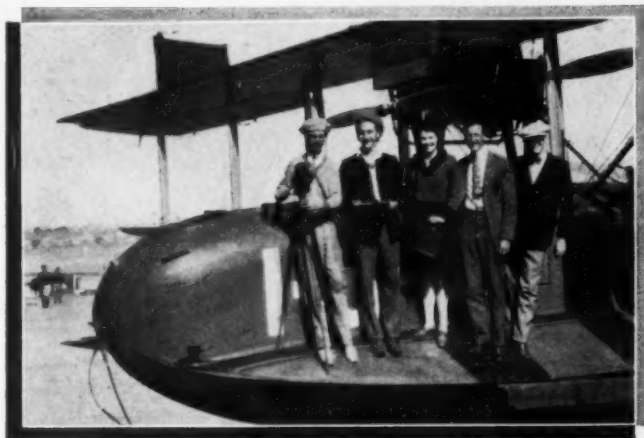
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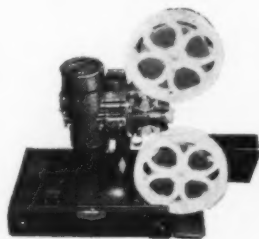
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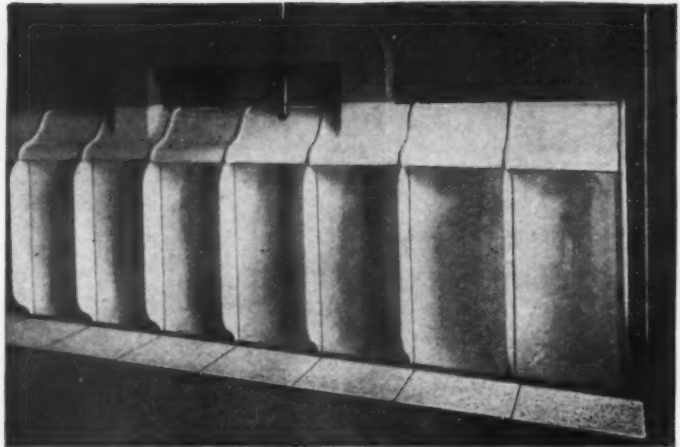
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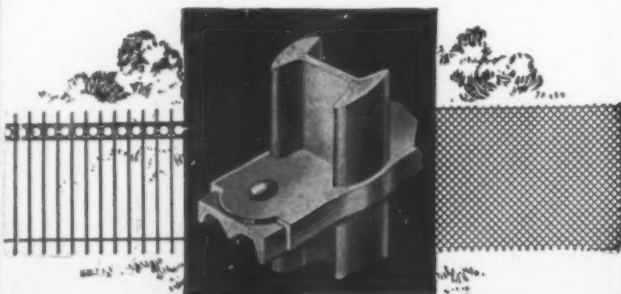
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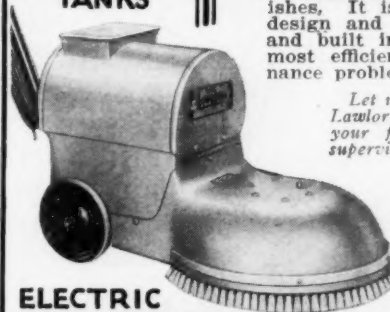
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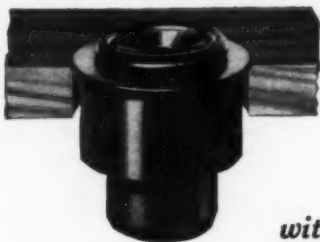
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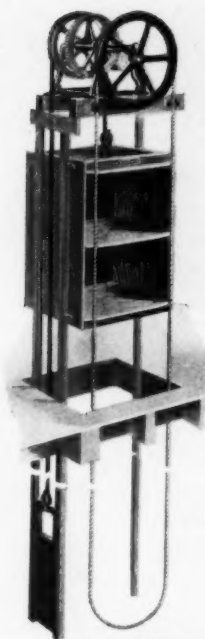
*No more mud!* The improved, all-hard-rubber Sengbusch Self-Closing Inkstand always supplies clean, fresh ink to the pen.

*No breakage!* Protects desks, books and clothes. Simple to install. No special tools required. Millions in use. No modern school can afford to do without the inkwells that solve one of the most difficult, problems of school management.

*For Superintendent, Principal and Teacher*—a complete line of desk necessities: Sengbusch Inkstands, Dipaday Desk Sets, Ideal Sanitary Moisteners, No-Over-Flo Sponge Cups, Kleradesk—Write for detailed information.

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Type "FDCG"  
Dumb Waiter

Write to Sedgwick Machine Works, 165 West  
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# LIFTING FOOD and SUPPLIES

Sedgwick Dumb Waiters easily and quickly convey food and supplies from one floor to another. Absolutely safe and costless in maintenance.

Our Engineering Department will gladly study your problem and submit recommendations, blue prints and data.

**SEDGWICK**  
*Dumb Waiters - Elevators*  
**FOR SCHOOLS**



## WHEN YOU NEED EXPERT INFORMATION

The growing emphasis placed on motion pictures as a necessary part of the school program has brought specific attention to the equipping of the school auditorium. Many of its problems are technical. The majority of them are successful of solution only by equipment experts who study the individual requirements of each auditorium. In no other way can the best projection results be secured.

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the school administrator through National Theatre Supply Company. Regardless of

where your school is located, there is a National Branch within your immediate vicinity. Its projection experts will gladly confer with you toward attaining the best results in school motion pictures with the greatest possible economy.

For further particulars regarding this School Service fill in your name and address and mail this advertisement today.

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**NATIONAL THEATRE  
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*Branches in all Principal Cities*

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Water flowing from R-S drinking fountains is pure—free from the contamination of lip contact—just a good, refreshing drink safeguarded by a patented Vertico-Slant feature. This arrangement provides a slight slant stream which prevents water from falling back upon the jet.

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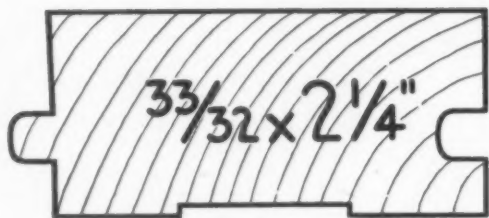


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## MAPLE FLOORING FOR SCHOOLS



The above flooring (illustration is actual size) meets all the requirements for a SUPERIOR SCHOOL FLOORING that will withstand the hard usage to which it is exposed by children's feet.

All ROBBINS FLOORING is seasoned in the open air and then mechanically dried, insuring toughness and long life.

*Specify* **ROBBINS FLOORING**  
FOR ALL SCHOOL PURPOSES

**ROBBINS FLOORING CO.**  
RHINELANDER  
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Every Valleyco Blackboard is  
CERTIFIED

## CINOPLATE

### VALLEYCO BLACKBOARD

The blackboard that wins the praises of schools everywhere—which have installed it as part of their permanent equipment. Day-in-and-day-out service is assured as well as complete satisfaction.

#### 3 Grades For Every Need— CINOPLATE

Grainless; knotless; water-proof. Specially treated wood. Priced right.

#### CINOBESTOS

Made of long asbestos fibre and Portland cement. Built to endure.

#### CINOBOARD

Specially constructed wood fibres and kiln cured. Affords a most unusual saving.

#### Choose Valleyco for these important features:

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**PERMANENCE—**

—+—  
**ECONOMY—**

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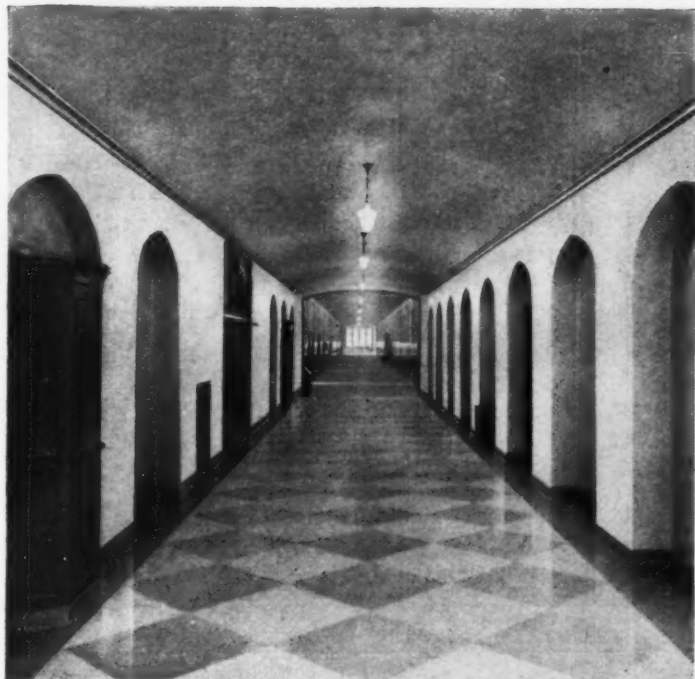
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—+—  
**EASY INSTALLATION—**

**The Valleyco Co., Inc.,**

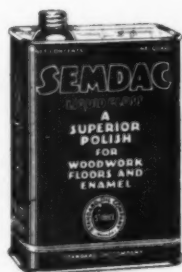
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# School floors need Semdac Liquid Gloss



In the development of Semdac Liquid Gloss the research department of Standard Oil Company (Indiana) has incorporated every desirable feature for the treatment of school floors.

On plain wood floors, Semdac acts as an efficient preservative, keeping down dust and retarding cracking or warping. It maintains the natural color of the wood, does not leave an oily or greasy residue, and it is safe from fire hazard. Less scrubbing is necessary. The floor impregnated with Semdac absorbs little moisture. Snow, mud, dirt tracked in by the pupils do not penetrate the wood but remain on the surface where removal is easy. This brings economy in school cleaning costs.



## SEMDAC FURNITURE DRESSING



Semdac Furniture Dressing is an ideal polish for the finer furniture. It leaves a brilliant durable lustre. Merely applying it removes the dirt. Gentle rubbing with one or more clean, dry cloths brings out the rich, high lustre.

Semdac Liquid Gloss finds universal use in the school. Its great cleansing action, its high luster, and its ease of application make it exactly suited to all school needs. Semdac can be economically purchased in barrels, half barrels, five gallon, half gallon, quarter and pint cans.

**STANDARD OIL COMPANY**  
(Indiana)

910 S. Michigan Avenue Chicago, Ill.

# SEMDAC

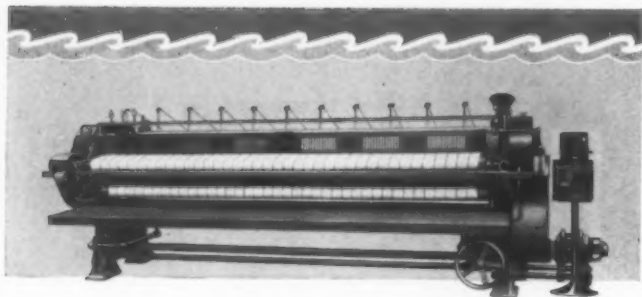
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STANDARD OIL COMPANY (Indiana)  
910 South Michigan Avenue, Chicago

I am interested in receiving  
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Name.....Address.....

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*Troy Standard Two Roll Flatwork Ironer.  
Occupies but 152 x 62 inches floor space.*

## Wrinkle-free flatwork at half the labor cost

Troy's Standard Two Roll Flatwork Ironer cuts labor costs in half. Its same side feed and delivery arrangement enables a single operator to do the work of two.

In addition to this labor-saving advantage, Troy's Two Roll Ironer provides a facility for turning out large quantities of school linens, fresh-looking and wrinkle-free. Write for full information on Troy Ironers and other Troy machinery for laundering school washables economically.

**TROY LAUNDRY MACHINERY CO., INC.**

Chicago - New York City - San Francisco - Seattle - Boston - Los Angeles  
**JAMES ARMSTRONG & CO., Ltd., European Agents; London, Paris, Amsterdam, Oslo.**  
Factories: East Moline, Ill., U. S. A.

# TROY

## LAUNDRY MACHINERY

Since 1879—The World's Pioneer Manufacturer of Laundry Machinery



*Wayne Type B Stand, Polytechnic Country Day School, Brooklyn, N. Y. Note Distance Between Seats and Width of Footboards.*

## FOR SPRING SPORTS! WAYNE STEEL SECTIONAL GRANDSTANDS

**Immediate Shipment—Any Number of Seats**

The portable grandstand that set new and unsurpassed standards of

**SAFETY—PRACTICABILITY  
COMFORT and ECONOMY**

*Advise us of your needs*

**WAYNE IRON WORKS**

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**T**HE Service department of The NATION'S SCHOOLS is at all times in a position to advise on purchasing sources for all types of school building materials and equipment and to see that the school executive is put in touch with a reliable manufacturer for any of his needs.

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Spotlights	Color Wheels	Connectors	Footlights
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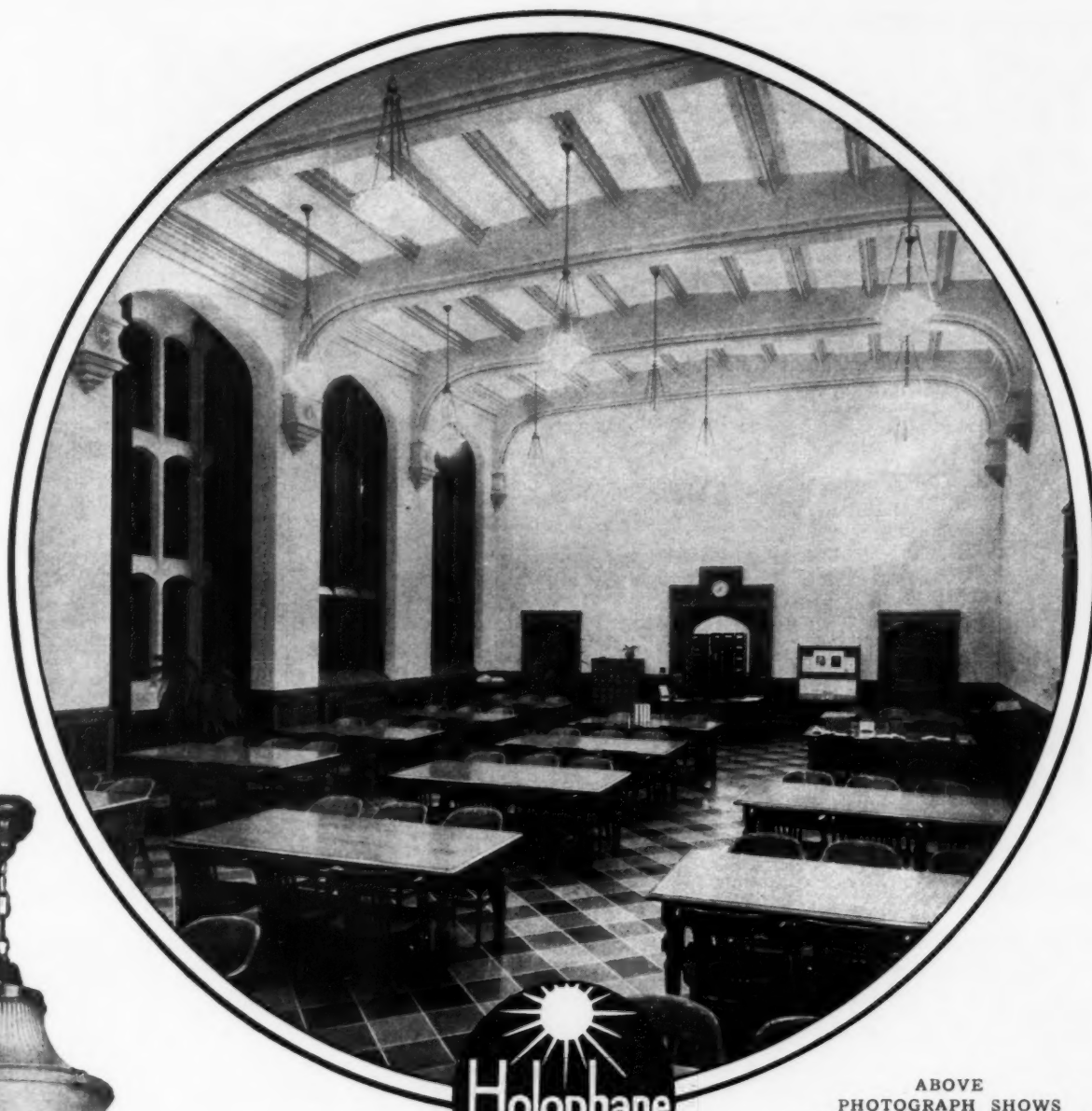
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has become an integral part of present day essential school equipment. It is important to the school official to know that he can put his library requirements into our hands with the feeling that the orders will be cared for completely and correctly to the last detail. ✻ We specialize in the library branch of the book business, handling library orders from many hundreds of School Boards and Colleges from all parts of the country. ✻ Satisfactory service and liberal discounts. ✻ Send us your next order, large or small, and avail yourself of the advantages which we offer to your Board.

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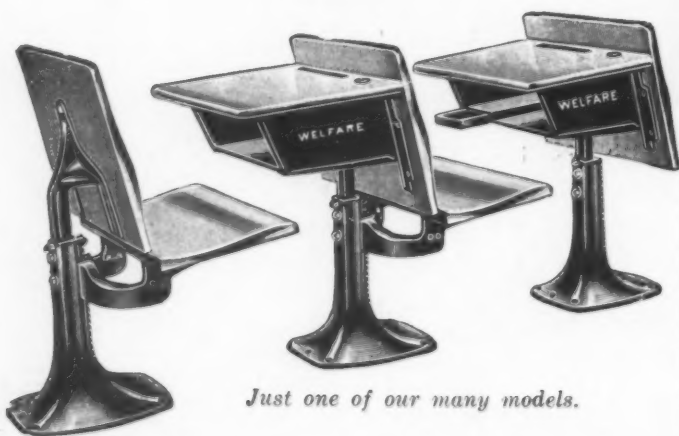
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DEODORIZING  
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## Another school equipped for healthful heating and economical operation . . .

Many existing heating systems can be converted to Differential operation at moderate cost. Arrangements may be made for funding the cost of change-over to Differential heating. The fuel savings meet the payments required. Dunham engineers will survey present systems without obligation.

THE NEW Charles Town, West Virginia High School completed last fall is heated by a Dunham Differential Vacuum Heating System. The exclusive operating characteristics of the Differential System, based upon the controlled use of sub-atmospheric steam, assure the uniform, comfortable heating service so essential where the health of pupils and staff is concerned. Because the use of cool steam, warm steam, or hot steam is balanced in accordance with the variations of outside weather conditions, overheating is eliminated, and the utmost fuel economy consistently obtained. In many installations where direct comparisons are possible fuel savings range from 25 to 40%.

Get the facts on the improved heating service and greater operating economy of the Differential System as applied to your own requirements.

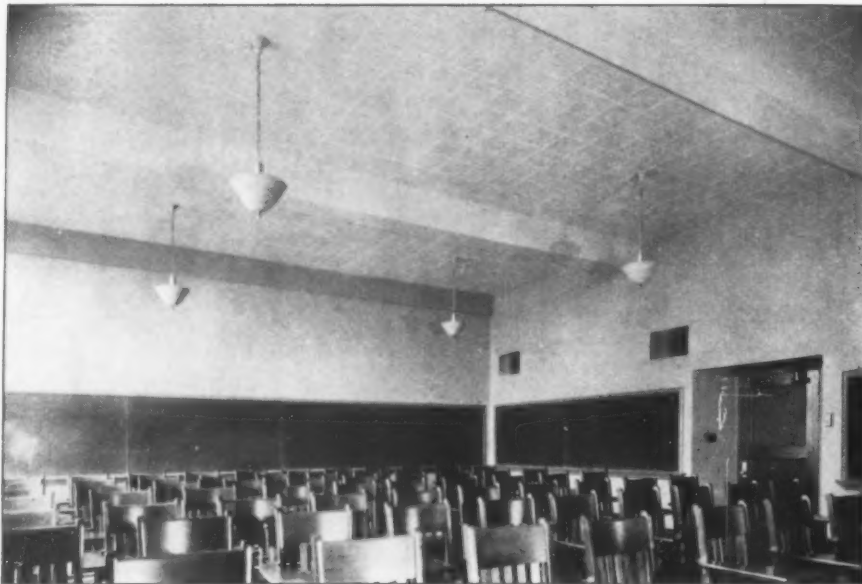
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*A lecture room in the University of Washington, Seattle. Acousti-Celotex applied to the ceiling subdues classroom noises, and, by absorbing reverberations, provides ideal conditions for lecturing.*

*Laboratories frequently present a serious acoustical problem. But the University of Washington authorities found an efficient solution in Acousti-Celotex.*



## How a Great University Banished Noise . . . .

*The University of Washington solved the noise problem  
effectively and permanently with Acousti-Celotex*

**W**HEN you enter the halls and lecture rooms of the University of Washington you sense instantly the *absence* of echoing noise and din usually found in busy schools.

The reason is simple—Acousti-Celotex has been applied to the ceilings.

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Hundreds of schools and colleges are enjoying this freedom from nerve-racking noise. Their

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Acousti-Celotex comes in finished units which are quickly applied to the ceilings in old or new buildings. The natural color of Acousti-Celotex is a pleasing buff, but it may be painted and repainted without impairing its sound-absorbing efficiency.

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FOR LESS NOISE—BETTER HEARING

# Von Duprin

Self-Releasing Fire and Panic Exit Latches

## Painting the Lily - - Successfully

To improve upon the superfine has always been the dream of real craftsmen.

But opportunities come very rarely.

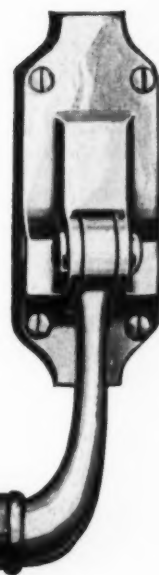
One came to us, however, when the new series genuine Type "B" Von Duprin devices were designed. By a happy inspiration—if we may use that phrase—we were able to radically cut down the number of parts and make the actuating members of the new design strong and long wearing beyond all precedent. The superlatively good was made even better.

To secure these better devices, we suggest that you request

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*Why be satisfied  
with a partly clean floor  
at double what a clean floor costs?*



## Even the cost of Mopping is CUT in HALF by this Amazing Combination

MOPPING never ~~was~~ efficient. Now it is not even cheap. The FINNELL combination scrubber and water absorber makes mopping the most costly way of maintaining floors. Mopping does not do a thorough job therefore means a loss in prestige and public esteem. It is costly because it takes twice as long to mop a floor partly clean as it takes this FINNELL to scrub a floor thoroughly clean.

High speed, twin disc scrubbers on this new FINNELL scour loose every particle of grime and grit. Immediately, the vacuum picks up the water, in which the dirt is held in suspension. There is no time for the dirt even to settle on the floor before it is drawn into the tank with a powerful suction. The floor is clean and dry in a few seconds after the machine has passed over it. No dirty mop splash on the baseboard. No dirty streak at the bottom of the doors.

In the average building this FINNELL will pay for itself in less than a year. After that it will continue to save its price many times—clear profit.

Let us estimate what it will do on your floors. Send us the essential data, using the space below, and we shall be able to tell you conservatively what you can save by installing the FINNELL. Fill out and mail today. FINNELL SYSTEM, INC., 1207 East Street, Elkhart, Indiana, and Ottawa, Canada.

Fill out and mail to us the questionnaire below and we shall be able to tell you how much you can save over the cheapest method of cleaning by hand.

**FINNELL**  
*Est. 1906*  
**ELECTRIC FLOOR SCRUBBER-POLISHER**

**IT WAXES - IT POLISHES - IT FINISHES - IT SCRUBS**

### *Floor Survey of Corridors and Other Open Floor Space*

State ..... City ..... Street .....

Type of building.....

Is floor mopped.....or scrubbed..... or both? .....

How many times monthly it is mopped?..... scrubbed? .....

Number of floors above 1st floor..... Area of each.....sq. ft.

Area of first floor.....sq. ft. Total area .....sq. ft.

Number of men used .....Hours per day.....Total hours.....Hour rate.....

Number of women used .....Hours per day.....Total hours.....Hour rate.....

Kinds of floors: Wood ☐ Marble ☐ Terrazzo ☐ Rubber ☐ Mastic ☐ Linoleum ☐

Present condition: Clean ☐ Coated ☐ Dirty ☐

What condition is required.....Kind of water: Soft ☐ Hard ☐ Hot ☐ Cold ☐

Material used: Abrasive ☐ Soap Powder ☐ Softener ☐

Machinery used .....Scrubber .....Mopper ..... Mop Truck  
(Give name and size of brush ring)

State type of current and voltage used.....

Furnish sketch of floor plan showing location of electric sockets, elevators and slop sinks.

Date..... Signature.....